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THE DEEPENING OF MARKET BASED REFORM: BOLIVIA'S CAPITALIZATION PROGRAM

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INTRODUCTION
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Bolivia's capitalization program is in some ways a culmination of the trend in Latin America of implementing so-called neoliberal economic policies and the consequent reform of state institutions. It is a culmination not because it is more comprehensive in terms of assets privatized or of the scope of the state's retreat from *dirigisme* to rely more on market mechanisms; indeed, other Latin American countries arguably have done more in this regard. Rather, the Bolivian program is a culmination in the sense that capitalization--a specific combination of privatization, pension reform, and regulatory reform--meshed three legally separate programs into one conceptually seamless plan.

Capitalization involves the sale of *new* shares in major state-owned Bolivian firms to foreign investors, with the investors' money to be earmarked for investment by the firms. The state's shares in the firms were given to two private pension firms, who assumed the responsibility of paying a social dividend, the *Bonosol*, to eligible Bolivians over the age of sixty-five. Simultaneously, the pension firms began operating Bolivia's new defined-contribution pension system. The final component of the program, regulatory reform, seeks to eliminate government interference in the operation of the newly-privatized firms without abdicating the government's legitimate role in regulating these industries.

On May 19, 1997, a group of scholars met at the Woodrow Wilson International Center for Scholars in Washington, D.C., to discuss the roots and ramifications of Bolivia's capitalization program. The workshop also aimed at examining the Bolivian experience from a comparative perspective, with the idea of assessing the potential for the application of similar programs in China and/or Eastern Europe. The meeting was coordinated jointly by the Latin American Program of the Wilson Center and the Bolivian Ministry of Capitalization. This introduction provides a summary of the presentations and discussion that emerged from the workshop. The rest of this Working Paper consists of the six papers presented by workshop participants, each revised afterward in response to specific points raised in the discussion.

The Presentations

In his presentation (not included in the Working Paper), Paul Reynolds, international director of the Adam Smith Institute in London, placed the Bolivian capitalization experience in the context of privatizations that have taken place in other parts of the world. He pointed out that in virtually all countries the valuation of firms being privatized is a key psychological barrier for the sellers of state assets. The value of firms being privatized, however, is contingent on the economic environment in which they will operate in the future. Thus, if the government seeks to boost the price at which they sell firms by offering monopolistic positions or restricting competition or by providing other benefits to the future owners of privatized firms, privatization may have negative effects on the future economic environment. On the other hand, if the government seeks to increase the value of firms being privatized by offering buyers a stable economy, a business-friendly environment, low taxes, etc., privatization will have a positive impact on the economic environment.

Reynolds hypothesized that in formulating the capitalization program, the Bolivian government was guided by four assumptions. The first is that there was a need to move quickly to privatize firms. Consequently, no restructuring of firms, which would have required both time and government resources, could be undertaken to increase the selling price of the firms. Second, by opening up the capitalization process to foreign buyers, the government demonstrated that it believed that the economic nationalism of the electorate could be overcome, possibly because people's preference for development and growth would overcome their preference for control of these firms. Third, by choosing capitalization over privatization through the sale to the new owners, the government was seeking to ensure that funds for investment by the new owners would, in fact, be available early on and that such funds would be used wisely. Reynolds questioned whether such a guarantee was necessary from an economic standpoint or whether it mainly served a public relations purpose. Finally, the government must have assumed that the firms being privatized were going to be viable in the long run and that they would generate profits and dividends even in the short run.

Reynolds further argued that evaluating the Bolivian capitalization scheme could only be done by comparing it to realistic alternatives. He suggested two such alternative scenarios. One involved selling 100 percent of the firms to new owners, with a small proportion of shares distributed to workers. Investors could then finance needed investments by selling additional shares. While total investments by privatized firms might be less than that achieved under capitalization, this might well be desirable from an economic standpoint. Alternatively, 51 percent of the shares could be sold to a new owner, and the rest distributed directly to pension funds or to the population, the latter method allowing for a measure of targeting of low income individuals. In all, these options, according to Reynolds, are not markedly superior to the one chosen.

Nevertheless, Reynolds suggested, with the benefit of hindsight, four things might have been done differently to yield better outcomes. The first was that the exclusivity that was granted to the telephone company, for example, rather erroneously created a *de jure* monopoly where one was not needed. The gains in higher selling price achieved by offering a term of exclusivity to the foreign investors is more than offset by the welfare losses from the resulting lack of competition. Second, a larger number of shares should have been distributed to workers and managers in order to provide them with greater incentives. Third, the distribution of shares between the foreign investor and the pension funds may lead to conflicts about their respective roles in corporate governance, and clearer control by the investor should have been established. Finally, Reynolds questioned the likely role and motivation of the pension funds in the future, as they begin to face the need to sell their shares in the privatized firms.

In the presentation based on her paper, which immediately follows this introduction, Carol Graham, visiting fellow at the Brookings Institution in Washington, examined the political economy of the capitalization program, placing it in the longer-run context of Bolivia's economic stabilization and drive to achieve economic growth. She noted that efforts to achieve greater equity were likely to be aided by a higher rate of economic growth, but that such a connection did not necessarily imply that Bolivia's poor would support market-oriented policies, since these were often perceived or criticized as leading to greater disparities in incomes. Thus a key policy problem for Bolivia's political system is create support for reforms among the poor, who make up the majority of the population. Moreover, Bolivia's economic endowment suggests little likelihood that an economic boom will provide windfall gains in income and therefore mitigate the potential opposition of the poor. Among the employed, there is opposition to such reforms from organized labor, which is concentrated in those sectors where privatization is likely to have the greatest impact. Finally, the fact that privatization places important national assets in the hands of foreigners is disturbing to many Bolivians.

Graham also pointed to some positive aspects of the political landscape. All the major political parties are committed to the general principles of free market reform, even if they differ over details. This broad agreement fosters an atmosphere of compromise and cooperation and forestalls political conflict. The country's macroeconomic stability, achieved after a period of hyperinflation, also serves as an outcome that voters see as worth preserving, thus limiting the likelihood of large swings in economic policy.

Graham therefore sees that the task of Bolivian policy makers is to promote necessary reforms in a way that increases the number of Bolivians who have a stake in the new system, while not antagonizing the poor into opposition or pushing them into apathy. Capitalization achieves these goals in three ways. First, it retains a 50 percent domestic stake in the firms being privatized. Second, through the Bonosol, it gives Bolivians a direct stake in the success of the privatization process; a stake that may, in fact, favor the poor. Finally, through sales of shares to workers in the firms being privatized, it provides them with a stake in the success of their companies. The design of the social security system also has some positive political economy features. By providing for custodianship over the shares of the privatized firms, the pension system prevents the poor from consuming or dissipating their newly-gained assets. Moreover, the Bonosol serves as a minimum pension that the government cannot finance out of current income.

Graham stressed that the political economy of the Bolivian capitalization and pension reform should be viewed within the broader social reforms of the *Plan de Todos*, and especially educational reform and the decentralization of power to municipalities.

Josef Brada, professor of economics at Arizona State University, compared Bolivia's capitalization to the process of privatization taking place in the transition economies of Eastern Europe and the former Soviet Union. While useful lessons can be gained from such a comparison, Brada stressed that important differences between Bolivia (and Latin America generally) and these economies in transition must be kept in mind. In the transition economies, there was a greater need for macroeconomic stabilization as most countries suffered from large declines in output, the collapse of intra-regional trade, and high levels of inflation. Western Europe, their major trading partner, was also experiencing slow economic growth, and its policies discouraged the expansion of East Europe's exports. In contrast, Bolivia, and Latin America in general, were undertaking capitalization in a period of relative macroeconomic stability, buoyant growth of output and incomes, and expanding intra-regional trade. Thus, privatization in transition economies was being carried out in an environment that was less encouraging to buyers. Many of the transition economies were simultaneously attempting to create democratic institutions and governments, and privatization was seen as a key tool for breaking the power of old political elites, a factor that was irrelevant to the design of the capitalization program in Bolivia. In addition, the scope of privatization in the transition economies was greater than it was in Bolivia. The state sector had been much larger in East Europe, and the number of firms to be privatized far outnumbered those capitalized or privatized in Bolivia.

There was greater congruence between Bolivian and transition economies' economic objectives. Both sought to make firms more efficient, to reduce the strain on the state budget, to develop the domestic capital market so as to improve financial intermediation and to strengthen corporate governance, and to stimulate capital inflows. In the transition economies, privatization was also a means for breaking up large firms, but privatization was not used to fund pensions or to redistribute income to the poor.

Brada argued that, because of the extent of the privatization process in transition economies, a broad range of techniques--including restitution, sale, and mass or voucher privatization--all had to be employed by most countries. After describing the experiences of the former East Germany and Hungary with sales of state-owned enterprises (SOEs), Brada described mass privatization in the Czech Republic, Poland, and Russia. He noted some similarities with the Bolivian model. Like the Czech and Polish mass privatizations, the Bolivian capitalization "locks up" the direct benefit due the population in a financial intermediary. In the Czech Republic and Poland, the intermediary is an investment fund; in Bolivia, it is the pension fund. These funds play two sorts of paternalistic roles, one to keep people from consuming their newly-gained wealth and the other to play a role in corporate governance. Brada questioned whether such institutions could fulfill these paternalistic objectives without coming into conflict with the objectives of increasing savings and improving the efficiency of firms.

Lan Xue's paper, which follows Brada's below, sought to draw some lessons from Bolivian capitalization for the Chinese state-owned enterprise (SOE) sector. Xue, assistant professor at the Elliott School of International Affairs at the George Washington University, noted that the Chinese SOE sector, despite its gradually declining share in GDP, remains a major employer and generates much of China's investment outlays. Moreover, determined efforts to improve its economic performance are required. Chinese SOEs as a group generate significant economic losses, most of which are covered by loans from the banking system. The Chinese government has been pursuing reforms designed to improve incentives for managers and workers in SOEs and to give them the autonomy to respond to these incentives, though with limited success at best. Chinese SOEs remain constrained by the vestiges of central planning and by the need to provide extensive social and health services to their workers.

According to Xue, the lessons for China do not lie in the process of capitalization *per se*. This is because China's SOE sector is huge, and funds to transform it through rapid capitalization are available neither domestically nor from abroad. Moreover, China's government is not eager to disengage itself from the economy, and it prefers gradual rather than rapid measures. Therefore, only parts of the SOE sector could be capitalized.

Instead, Xue drew lessons from the Bolivian model that are based on what he sees as the strong points of the capitalization procedure's implementation. He especially valued the flexible and pragmatic approach taken by the Bolivian authorities in developing a process that provides clear incentives for investors, direct benefits to the Bolivian population, and a transparent regulatory framework. Xue noted that privatization in China could not follow such a model slavishly because the direct distribution of benefits would be politically infeasible and because, for small and medium-sized SOEs, transparency would be hard to achieve. Nevertheless, these key principles of the Bolivian capitalization process are valuable guidelines for Chinese policy makers even if the specifics of the Bolivian program are not applicable to China.

The central role of the Bolivian Ministry of Capitalization as the focal point of the privatization program, with a clear mandate and strong powers, is also seen by Xue as a model for China, where SOE reforms often become entangled in the competing influence and interests of the many government agencies that oversee the SOE sector. Finally, Xue pointed out that a regulatory system such as the one developed as part of the capitalization process in Bolivia would benefit China by accelerating the development of that country's lagging communications and public utility infrastructure.

Later in the workshop, the focus of the presentations shifted from capitalization to pension reform. Yves Guérard, chairman of Sobeco Ernst & Young, and his colleague, Martha Kelly, both of whom served as strategic consultants to the Ministry of Capitalization, discussed the major considerations that faced Bolivian policy makers in framing the design of the new pension system. Without doubt, the pay-as-you-go system that had been in place in Bolivia was neither satisfactory nor sustainable. Demographic change was altering the age composition of the Bolivian population and raising the ratio of pensioners to taxpayers. Moreover, the existing system of defined benefit pensions was neither equitable nor linked to the contributions workers had made or to the fiscal potential of the state. As a result, the government's liabilities to the pension system were about US $3 billion and likely to grow in the future.

Guérard and Kelly described the two components of the new system, the Bonosol and the new defined-contribution pension scheme, in turn. With respect to the Bonosol, they described the practical aspects of determining eligibility for Bonosol payments, the distribution of funds, welfare implications of the scheme, and measures taken to reduce fraud. They also discussed how the Bonosol scheme would help to make the shares of the capitalized firms more liquid.

With respect to the new defined-contribution pension scheme, Guérard and Kelly explained how the transition from the old to the new pension system would take place, and what effect it would have on pensioners and on those currently employed and contributing to the former pension system. They set out in considerable detail the benefits that are available under the new pension program. Their presentation also explained how the two private pension companies (*Administradoras de Fondos de Pensiones*, or AFPs) were selected, organized and regulated. The AFPs are foreign owned and the two operators were selected on the basis of pre-set criteria and a system of competitive bidding.

In their presentation, David Cole and J. Bernardo Requena Blanco, both of whom were formerly with the Harvard Institute for International Development in Cambridge, called Bolivia's pension reform both more drastic, because it terminates all previous pension schemes, and more daring, because of Bolivia's relatively limited needs, than other Latin American pension reforms. They elaborated on these points, explaining what current thinking on the functions of a pension system is and how one can handle the transition from old, actuarially unsound systems to new, defined-contribution systems. They also pointed out that the design of the new system influences not only the distribution of income between generations and between the rich and the poor, but also major macroeconomic outcomes, such as savings and investment, economic growth, and the government deficit. The sustainability of the new pension system is, therefore, critical for Bolivia's future.

Among the key features of a pension system that determines sustainability is the replacement ratio, the amount of pre-retirement income that the pension represents. In Bolivia, a 30-40 percent replacement ratio is likely to be consistent with the 12 percent contribution rate, although this conclusion depends critically on the rate of return earned on workers' contributions to the system. Also important are the government's ability to cover the liabilities of those transferred to the new system from the old; the actuarial soundness of the Bonosol scheme over the next 80 or so years; and on the actuarial soundness of the defined-contribution scheme. Cole and Requena Blanco stressed that, although the pension law and the regulation of the AFPs can set the framework for a sustainable pension system, exogenous factors will also play an important role. The overall economic performance of the Bolivian economy will, of course, help determine the value of the shares that will constitute a large part of the AFPs' holdings. Moreover, a rapid increase in wages relative to other incomes will swell the inflow of funds into the pension system, possibly at the expense of savings from non-wage income. The share prices of the capitalized enterprises will also be influenced by how well their managers run the firms and by the regulatory environment they face. The efficiency with which the AFPs will carry out their responsibilities will be important as well. In all, the two experts were cautiously optimistic that the program can meet its established objectives.

In the final presentation, Betty Slade, who also formerly worked with the Harvard Institute for International Development, stressed that, by relying on a pension system whose ultimate success depends on gains generated in financial markets, Bolivia has had to place greater attention on financial sector regulation and reform, since it is this sector that provides the underpinnings of the pension system. This regulation includes the two AFPs and any others that enter the market after the end of the period of exclusivity. She described the regulatory environment established for the AFPs in some detail. A particular weakness is the Bolivian legal system, which she suggested may be inadequate to the needs of a modern market economy. Also problematic is the underdeveloped state of administrative law. Slade examined the various regulatory processes and laws that have to be introduced or put into operation in Bolivia in the light of other countries' experience.

Slade concluded that the Bolivian system of financial regulation is conceptually sound, but stressed that much needs to be accomplished in terms of putting the conceptual framework into operation. Here both the Bolivian government and the AFPs have much to do in the near future.

The Discussion

The presentations sparked a lively discussion among the workshop participants, and, while this summary does not strive to present a systematic account of the points raised, some of the salient issues are collected below.

Commenting on the morning session, Donald Lessard, professor of international management at the Sloan School of Management of the Massachusetts Institute of Technology, stressed that the Bolivian capitalization put into play franchise assets, that is, firms whose value is based largely on the right they have to perform a particular function. Such firms do represent different risks and opportunities than do firms whose value is represented by tangible assets, such as machinery and plant and the expertise to use them. He also noted the advantages that Bolivia enjoyed by not requiring privatization proceeds to finance the government's operation. The key issue to answer, according to Lessard, is whether the firms in the capitalization process can be successful in the long run. That is, did investors buy the right firms and will the right incentives for effective investment and dividend policies be in place? In addition to this "fiscal sustainability" of the reform, Lessard pointed to the question of "social sustainability", or whether the population would view foreign ownership as fair and acceptable. He also noted that capitalization was not the complete solution in creating a dynamic economy. Capitalization created neither new entrepreneurs nor funds for investment outside the capitalized companies.

A second theme raised by Lessard was the ability of countries such as Bolivia to take advantage of mechanisms, institutions, and firms' desire for a good reputation in the global economy. The existence of these sharply reduced the complexity of capitalization, provided institutions whose services could be used to underpin the capitalization process, and sharply curtailed the danger that foreign investors and the managers of the AFPs would act in opportunistic fashion.

Among the issues discussed in connection with the morning presentations were whether growth was likely to benefit the poor in Bolivia, whether appropriate and effective corporate governance was likely to emerge, and whether regulation would not become a tool for populist political interests.

The discussion later in the seminar centered on how a capital market might emerge in Bolivia, what the investment strategy of the AFPs might be, and how Bolivian shares and government bonds could find their way into foreign capital markets. The obligation of the AFPs to purchase government bonds was examined as well.

In sum, the workshop--and this resulting Working Paper--presents a comprehensive overview of the Bolivian capitalization process in a comparative or international setting and a detailed analysis of the Bolivian pension reform. All participants stressed the close linking of the three main components of the program, capitalization, pension reform and regulatory reform.

BUILDING SUPPORT FOR MARKET REFORMS IN BOLIVIA: THE CAPITALIZATION AND POPULAR PARTICIPATION PROGRAMS[1]

by Carol Graham

Discussion of Latin America's reform record increasingly focuses on equity issues and on the need for higher rates of growth, institutional reforms, and improvements in basic social services.[2] There is an increasing sense of urgency in the debate on these issues, and a widespread perception that market-oriented reforms have exacerbated the region's already skewed distribution of income. Many observers fear that lack of progress in addressing issues of poverty and inequality will lead to a voter backlash against reform.[3] Despite that perception, recent empirical evidence shows that after a clear worsening of income distribution during the crisis years of the 1980's, that negative trend was halted and even reversed by the reforms of the late 1980's and 1990's.[4] Yet reversing a negative trend is not enough. In order to make those reforms politically sustainable, the poor in the region - the majority of the population - must believe that they have a direct stake in market-led growth.

Investments in human capital and stronger institutions will be key to higher and more sustainable growth, as well as to enhancing the poor's participation in the process.[5] Explicit strategies to broaden the base of stakeholders in reform can also play an important role. A number of countries in the region have implemented programs to increase either the voice or choice of users of public services as a means to enhance the quality and coverage of services, as well as to directly involve the beneficiaries in the process. Others have implemented programs to encourage the participation of low-income groups in the privatization process.[6]

Some of the most innovative attempts to broaden the base of stakeholders emerge from South America's poorest country, Bolivia. Through the capitalization program, the government of Gonzalo Sanchez de Lozada has invested fifty percent of the shares in its privatized public enterprises in a new social security system, which provides a new institutionality for increasing savings and growth, and distributes the dividends in the form of annual solidarity bonds to all Bolivians over the age of 65. At the same time, through the popular participation program, the government is attempting a major redistribution of public resources to benefit poor rural areas and to introduce a novel approach to the allocation and delivery of social services by devolving responsibility to the municipal and community levels. These two reforms, in conjunction with a major education reform, comprise the Sanchez de Lozada government's Plan de Todos (Plan for All), an explicit attempt to involve the majority of Bolivians as direct stakeholders in the reform process. This paper examines the record of those two reforms in comparative perspective, and attempts to evaluate their effects on equity, on institutional performance, and on the political sustainability of market reforms in Bolivia.

The Political Economy of the "Plan de Todos" Reforms

It is no surprise that Gonzalo Sanchez de Lozada was the driving force behind initiatives to enhance the sustainability of market reforms. In 1985, Bolivia was the first country in the region to stabilize high inflation and implement structural reforms under democratic auspices. As Minister of Economics and Planning during the 1985-89 Paz Estensorro government, Sanchez de Lozada was the architect of the macroeconomic reform package widely known as the New

Economic Policy (NEP). The main features of the package, which stabilized hyperinflation and achieved positive rates of growth were market liberalization and price decontrol; the opening of the economy to foreign trade and investment; and the liberalization of the labor market. In 1986, the same government implemented an innovative safety net program, the Emergency Social Fund, which introduced market principles - via the demand of the beneficiary population - into the allocation of safety net benefits. The social fund approach has since been adopted by dozens of countries both within and outside Latin America.[7] And unlike many countries where social funds have been rather transient policy tools, in Bolivia the approach has been incorporated permanently into the public sector's operations, via the Social Investment Fund (FIS), which is responsible for the financing of health and education infrastructure.[8]

By the mid-1990's, all of the major political parties in Bolivia were committed to a continuation of the NEP, and all of them ran on a pro-reform platform in both the 1989 and 1993 national elections. Although Sanchez de Lozada's Nationalist Revolutionary Movement (MNR) party was out of office from 1989-1993, the governing Leftist Revolutionary Movement (MIR) - Nationalist Democratic Action (ADN) coalition maintained the NEP reforms, and made progress in deepening them in some areas.

Despite the consensus among the major political parties, there is a more pressing need to broaden the base of support for reform in Bolivia than in most countries in the region. First, Bolivia has the highest poverty ratio in South America. Second, it has a very low probability of attaining the boom levels of growth that have helped build broad popular support for reform in some other poor countries, such as Peru. Third, Bolivia has a vocal and highly ideological union movement, which while not by itself capable of reversing the course of economic policy, can mobilize opposition to reforms and create social unrest. While the union movement was substantially weakened by the dismantling of much of the state-owned tin mining sector in the mid-1980's, the Confederation of Bolivian Workers (COB) retains influence and monopoly control over certain critical sectors, such as education. It remains strongly tied to the statist, nationalist ideology of the 1952 revolution. The COB refers to the Plan de Todos reform laws as the "tres leyes malditas", or the three "accursed" laws.[9]

There is also a fairly strong populist current in Bolivian politics, outside the realm of the three major parties, the MNR, the ADN, and the MIR.[10] This movement was most evident in the capital city La Paz, where it is embodied in the support for the (recently deceased) anti-reformist politician, Compadre Palenque and his Conscience of the Fatherland (CONDEPA) movement. Condepa and other populist movements do not have sufficient support to overturn the influence of the major parties, but they are vocal and visible reminders of the high levels of poverty, and the extent to which the poor remained marginalized from the benefits of reform, beyond the immediate benefits achieved by the halting of inflation.[11]

Adding to this was the public perception that the macroeconomic reforms had been imposed from above, by a team of elite technocrats who were concerned solely with efficiency. "Indeed, because the path of structural reforms was shaped "on the go", they were generally justified on the basis of engineering values of efficiency and rationality at the expense of the ingrained values of solidarity and expectations of greater equality."[12] The ESF, for example, was a highly visible safety net program which provided income relief and infrastructure improvements for poor, if not the poorest, groups. It was therefore efficient from a poverty reduction perspective, and may have even built support for reform among previously marginalized groups. Yet it did little to build support for reform among the direct "losers" in the process: the lower and middle classes and organized labor, who for the most part would not work for ESF wages levels, which were at or near the unofficial minimum.[13]

Finally, of all the structural reforms, privatization of state-owned enterprises was the most difficult politically, despite the fact that many of the enterprises were incurring major losses. The governing MNR party had made its political fortune through the implementation of the 1952 revolution, in which the country's major industries - tin mining, natural gas, electricity, and railroads, many of which were foreign-owned - were nationalized. The union movement had its origins in the revolution and in particular in the mining and oil industries. For a small, poor, racially divided, landlocked country, with high levels of income inequality and a history of foreign economic domination, the 1952 revolution had far-reaching political implications. The prospect of the return of the nation's major natural resources to private - and foreign - hands caused an explosive political debate, even at a time when many other countries in the region, which started their macroeconomic reforms well after Bolivia, implemented far-reaching privatization schemes. Only minor progress was made by the MIR-ADN government in the privatization realm, and more often than not enterprises were maintained under public ownership, while introducing intermediate reforms such as performance contracting.[14] The six major state-owned enterprises, which account for 12.5 percent of GDP, remained untouched.

Given this context, the Sanchez de Lozada government has dual and at times conflicting objectives in the Plan de Todos reforms: providing immediate benefits from reform for the average poor Bolivian, and increasing national savings and investment levels, as well as investments in human capital to generate higher growth rates and reduce poverty.[15] The most contentious of the reforms was, not surprisingly, the capitalization plan. Capitalization has two major objectives. The first is to make the privatization process more palatable politically by keeping fifty percent of the shares of the enterprises in Bolivian hands, and distributing the dividends among all Bolivians. The second is to increase savings and investment in the Bolivian economy by requiring the buyers of the enterprises to "pay" for their shares via new investments in the enterprises and by creating a new private pensions scheme in which most dividends are initially invested.

The popular participation program, which was introduced prior to capitalization, doubled the amount of tax revenue designated to local governments and changed the expenditure allocation from one based on the legal residences of taxpayers to a per capita basis controlled by municipal governments. This resulted in many poor rural areas receiving significant increases in resources, and also necessitated the formation of over 200 new municipalities.

A third and equally important component of the Plan de Todos is the education reform, which increases local responsibility for management and financing of schools; introduces competition and new requirements for teachers as well as new curricula and texts; and promotes diversity of cultures and languages in education - a critical issue in a society as racially heterogeneous as Bolivia's. Yet because similar reforms have been introduced elsewhere, and because its success hinges in large part on the success of the participation program, this paper will focus on the more novel approaches to reform in the capitalization and participation programs and in particular their explicit objective of increasing the number of stakeholders in reform.

The Evolution of Political Consensus

The most notable aspect of Bolivia's political economy context is the extent to which most if not all participants in the multi-party system have become party to a consensus on the irreversibility of the economic reform program. This is particularly notable in a country whose political landscape prior to 1985 was marked by fragmented and polarized party politics and repeated episodes of military intervention. This consensus stems partly from the dire nature of the pre-reform economic crisis, and the extent to which economic instability also threatened Bolivia's fragile new democracy in 1985. In Bolivia, as in many countries that have experienced extreme economic instability and/or hyperinflation, resolving severe crisis required the development of a domestic political consensus on reform. Such consensus often serves as an important source of political stability and support for continued economic reform for several years after the crisis is resolved.[16] The logic of economic and political reforms can then be complementary, as each requires predictable rules of the game and a state which is capable of serving as a neutral guarantor of the rules of the game, rather than as a provider of rents for competing interest groups. The structural reforms that were introduced in a variety of sectors in Bolivia sought to re-orient the state into one that is capable of playing such a role.[17] Finally, the economic changes that the NEP introduced and the collapse in the international price of tin dramatically reduced the significant power of the radical left and of the labor movement.

While not a sufficient condition for democratic development, macroeconomic stability was certainly a necessary one in Bolivia's case. Inflation went from 25,000 percent in 1985 to 3 percent two years later. GDP, which fell from 1978-1985, grew 2.7 percent in 1987 and 3 percent in 1989. The national budget deficit, equal to more than 25 percent of GDP in 1984 fell to 3 percent by 1988. Exports, which fell to US $500 million in 1985 increased to US $813 million by 1989, despite negative trends in the terms of trade. In the 1990's, the pace of growth and investment gradually picked up, in part as a response to the Sanchez de Lozada government's capitalization program. Growth was 3.7 percent in 1995, 3.7 percent in 1996, and is projected to average at 5.4 percent annually from 1997-2005.[18] Tax receipts were 12.3 percent of GDP in 1994 and 13.5 percent in 1995.[19] Public and private investment increased five points in 1996, to 19 percent of GDP, with the bulk of the increase in private investment.[20] Other important reforms included the establishment of an independent Central Bank, with the president holding a seven year term, and the passage of the SAFCO (System of Administration and Control of Public Accounts) law, which makes all public servants responsible for their decisions and accountable for the resources they spend.[21]

The gradual development of consensus on economic policy and on the need for coalition building seems to correspond with - and perhaps contributed to - the gradual development of a more moderate and less fragmented multiparty system. "This has been possible because interparty competition, once channeled into confrontation, now tends to express itself in the form of bargaining and coalition formation...The availability of a space at the center of the governmental system that could be filled by bargaining increased the incentive to bargain, and bargaining induced parties to become more centrist."[22] Between 1979 and 1993, the number of parties legally registered with the Electoral Court fell from 71 to 16. The most significant of the new parties are ADN, MBL, UCS, and CONDEPA. While no single party has majority status, majority formation is possible, with the center traditionally dominated by MNR, ADN, and MIR, whose total cumulative share in the last three general elections was between 63 and 65 percent.[23] Article 90 of the Constitution calls for a Congressional vote for president among the top three ranking candidates if none of them was able to maintain a clear majority. The president is then elected for a fixed term of four years, with no consecutive re-election. Since the resumption of legitimate elections in 1979, no candidate has attained a majority in the first round.

Thus there has been a predominance of likely - and unlikely - electoral coalitions or pacts. In 1989, for example, a coalition between the (moderately) left-wing MIR, led by Jaime Paz Zamora, and the center-right ADN elected Paz Zamora to the presidency, even though Sanchez de Lozada and the MNR had attained a plurality of the national electoral votes. Despite the unlikely nature of the alliance, the Paz Zamora government was both stable and committed to a continuation of the economic reform program. In 1993, the MNR again won a plurality but not a majority (36 percent versus 21 percent for Banzer). [See Table 1] The MNR allied with the MBL (the Free Bolivia Movement) and a splinter faction of the UCS (Civic Solidarity Movement) of the (deceased) populist leader, Max Fernandez, in order to obtain a governing majority in Congress.[24]

Despite this consensus among the major political parties, a strong populist current dominates the discourse of some of the newer parties, such as the UCS and CONDEPA. While some of these parties' discourse is anti-reformist, particularly CONDEPA's, most of it is anti-institutionalist, emphasizing the charisma of its leaders. The fate of both UCS and CONDEPA is unclear at best, meanwhile, given that both leaders have passed away.[25] Thus while "populist" opposition to reforms is a political concern, it remains at the margin of a fairly strong base of support for reforms among the three major parties.[26] Finally, a constitutional reform which aims to make the electoral system more representative - and thus reduce the appeal of populists - was passed in 1994. The reform added to the electoral system based on party lists by introducing first-past-the post voting in single-member districts for 50 percent of the 130 Congressional seats.[27]

There are also still major political challenges ahead. The internal structures of most political parties, with the exception of the MNR, which had an internal reform in the early 1990's, are far from democratic. Insufficient and inadequate voter registration also remains a problem, in part due to the remote nature of some regions of the country. The judicial system is still obsolete, corrupt, and subordinate to the executive. The union movement, despite its major reduction in size and strength since 1985, remains strongly opposed to "neoliberal" economic policies, and is capable of launching damaging work stoppages in critical productive sectors, such as petroleum, as well as in the social sectors, such as education. In April 1995, for example, the government had to call a six-month state of siege after a national teachers' strike, in which 70,000 teachers went on indefinite strike, led to violent protest. In March of the next year, tens of thousands of state workers took to the streets as part of a national strike to demand higher wages and to protest the planned capitalization of the national oil industry. The COB-led strike, which began with a hunger strike and the shut-down of public schools and universities, was joined by public health workers, miners, and some employees of the state petroleum industry.[28] While the strikes were disruptive, they did not achieve their objective of reversing the reforms, nor did they generate a broader political opposition movement. This reflects the extent to which the union movement's stance is a primarily a defensive one, which seeks to protect its position in the public sector. In any event, establishing a new trust between the traditional organizations of the state and those of civil society will be important to consolidating democracy and maintaining broad support for market reforms in Bolivia.

Poverty and Equity Issues

Foremost among the challenges facing policymakers and critical to the sustainability of both economic reforms and democratic institutions in Bolivia is reducing the high levels of poverty and inequality. Approximately 60 percent of the Bolivian population is below the poverty line, with some estimates as high as 70 percent.[29] GDP per capita, at US $876, is by far the lowest in South America. Distribution is also highly unequal: while the richest quintile of the population receives approximately 50 percent of total income, the poorest receives only 6 percent. The infant mortality rate, at 73 deaths per thousand live births is the highest in South America, and is twice as high in rural areas. Population growth, at 2.3 percent, remains high, making it difficult to reduce poverty at average growth rates of 2 to 3 percent. Life expectancy, at 61 years, is the lowest in South America, and is ten years lower in rural areas. While 74 percent of the urban population has access to safe drinking water, only 33 percent of the rural population does (slightly over 50 percent of the population is urban). And only 17.5 percent of the rural population has access to basic health services. Adult illiteracy is 23 percent while in Peru it is 15 percent.[30]

Available resources for social expenditures are distributed unequally. Until the education reform was implemented, the government spent US $600 per year on each university student versus US $70 per year on each primary education student. Ninety-eight percent of the total budget for health and education goes to payroll expenditures.[31] Total expenditures, meanwhile, at 3 percent of GDP, have recovered from their pre- 1985 crisis levels, but are still well below the reform objectives of 6 percent.[32] Recent research results highlight the urgency of improving quality and access of education services. While a number of factors determine labor incomes, education explains more of Bolivia's labor inequality than all other factors combined, and a year of education increases a worker's salary by 10 percent.[33]

Not surprisingly, social policy issues are of central concern for the Sanchez de Lozada government. Two of its three major reforms, the education reform and popular participation (discussed below), deal with social policy. A major education reform was launched in July 1994, which increased the responsibility of municipal governments in the financing and management of schools through locally constituted "nucleos escolares" (school nuclei), which include school board representatives, the mayor, and the school directors. The reform also introduced standard evaluation processes for teachers, new textbooks and curricula, and encouraged diversity of culture and language in education. By end 1996, the new system had been applied to 351 school "nucleuses", which applied to 2200 schools and 16 percent of enrolled students; this was to be extended to 500 additional nuclei and 3250 schools by end 1997, covering approximately half of the student population.[34] Popular support for the reform gradually increased as the reform was implemented. While 39 percent of the population supported the reform in March 1994, 60 percent did in March 1996.[35] Yet the education reform was met with widespread opposition from the teachers' union, and, as is mentioned above, resulted in a national strike and state of siege in April 1995.

In part because of the opposition from organized workers in the public sector, the education reform has been managed and implemented largely by the FIS, the successor to the Emergency Social Fund, the institution which has taken the leading role in social policy in Bolivia in recent years. The FIS, for example, was the first social policy institution to incorporate poverty criteria into its allocation decisions.[36] While this is a result of the stronger and more efficient institutionality of the FIS, it also suggests that much more needs to be done before the reform is institutionalized in the public sector, and reflects the difficulties that most countries face in reforming public sector institutions.[37]

The Plan de Todos reforms attempt to address some of the underlying causes of poverty, but they also raise important equity issues. The reforms are based on universal benefit for all Bolivians, and all benefits are allocated on a per capita basis. This had immediate equity enhancing effects, as there are far more poor Bolivians than there are wealthy ones, and should therefore receive more net benefits than the wealthy. Prior to the reforms, the poor for the most part had received less net benefits from public expenditures. Yet one could also make a strong case for a more progressive allocation - or at the least for limiting the benefits going to wealthy groups - when there is such a shortage of resources for basic social services for the poorest groups and such an inequitable distribution of income. The very poorest municipalities could certainly benefit from a greater than per capita share, as their administrative capacity is very weak and their ability to generate their own matching resources is much lower than that of wealthier municipalities.

Another critical choice from an equity perspective was that to invest the proceeds from capitalization in the pension system. Critics - including the major opposition parties - argue that there are many social needs which are far more pressing than social security in a country with major deficits in basic health and education and high levels of poverty and with a life expectancy of 61 years.[38] The transfer is likely to be regressive, as the wealthy are more likely to live beyond 65 than are the poor, particularly the rural poor. Yet there are many sound reasons for the decision that the government took. First of all, the high infant mortality rate in Bolivia skews life expectancy downward, and the average person that lives beyond one year of age also lives beyond 61 years. Secondly, because immediate social needs are so great - and certainly well beyond any available resources - it would be difficult if not impossible to invest any of the capitalization resources in future growth if they were directed at the social services, where there is virtually unlimited demand. While investments in human capital make significant contributions to growth and poverty reduction, higher savings and investment rates in Bolivia are <u>necessary</u> if not sufficient conditions for achieving those objectives.[39]

In all countries there are tradeoffs between making politically popular investments in immediate consumption and those in longer term growth. They are particularly difficult when the gap between available resources and legitimate demands for those resources is very large. These tradeoffs are even more difficult in the context of economic reform, which has differential effects on the living standards of particular groups, who are usually not the most poor and vulnerable, but are usually fairly vocal and organized.[40] Given these tradeoffs, and the very clear need for increased investments in Bolivia, the Sanchez de Lozada government's decision to direct the revenues from privatization to investment, while at the same time reallocating existing fiscal revenues to poor rural areas is a bold and forward-looking one. In addition, it would make little sense to increase resources for health and education significantly prior to fully implementing reforms in those sectors. The implementation record of the reforms will ultimately determine the extent to which they increase both efficiency and equity, as well as generate support for the reform process through the creation of new stakeholders, who themselves will have a role in determining the level of resources allocated to the social sectors.

<u>Creating New Stakeholders and Investing in Growth: The Capitalization Program</u>

Bolivia's capitalization program is an exceptionally innovative approach to reform which combines three objectives: privatization, social security reform, and broadening the base of stakeholders in the market process. The program was an explicit part of the 1993 electoral campaign of Sanchez de Lozada, and was a central objective of his government.[41] While Bolivia implemented far-reaching economic reforms well before many countries in the region, it lagged far behind in its attempts to privatize state-owned enterprises. Privatization was a particularly contentious issue due in large part to Bolivia's economic dependence on a few key mineral exports. This, coupled with limited domestic investment capacity, heightened concerns that privatization would result in a "selling off" of the national wealth and a return to foreign economic domination. The predominance of the mining and hydrocarbons industries also strengthened the political power of organized labor in those sectors, and unions understandably feared that they would have weaker bargaining capacity vis-à-vis large multinational enterprises.

The Sanchez de Lozada government introduced capitalization as a means to make privatization politically viable, and to keep at least a part of the natural resource wealth in Bolivian hands, while generating vital foreign investment at the same time. Under capitalization, the government allows a strategic investor - selected through a competitive bidding process - to purchase 50 percent of the shares in the privatized company. Instead of paying the government for the enterprise, the strategic investor agrees to invest the agreed amount in the enterprise within a fixed period of time. The other 50 percent of the shares are turned over to the Bolivian population and deposited in the collective capitalization fund of the new private pension scheme. The dividends from the shares, which are invested by two new pension fund managers, the Invesco Argentaria consortium and Banco Bilbao Viscaya, are distributed annually to all Bolivians over the age of 65, in payments of about US $200. All Bolivians, regardless of whether they contribute to the new pensions scheme, receive the dividend payments from those shares, which are called Bonosols or solidarity bonds. All workers who are currently contributing to the public pension scheme receive recognition bonds for their past contributions, and their retirement accounts are transferred to a new private pension system, which is managed by the new pension funds and regulated by the state.

Capitalization was a Bolivian initiative.[42] Major international agencies such as the World Bank and the IMF were initially opposed to the program, although they eventually lent their support (in varying degrees) as it became clear that the process was feasible with the first capitalization, that of ENDE, the state electricity company.[43] Bolivia then received a US $50 million IDA credit and a US $70 million loan from the Inter-American Development Bank to support the capitalization process.[44] The government had considered a voucher scheme like the Czech Republic's, in which all citizens are given shares in state enterprises. Yet in a context like Bolivia's, where the majority of the population is below the poverty line, there was a legitimate fear that most people would sell off their shares for immediate income benefit.[45] Even in the Czech Republic, the majority of those at or near the poverty line immediately sold their shares.[46]

Capitalizing the Enterprises

The six major state-owned enterprises, accounting for 12.5 percent of GDP, were included in the capitalization scheme. These were: ENDE (National Electricity Company), ENTEL (National Telecommunications Company), LAB (Lloyd Bolivian Airlines), YFPB (Bolivian Petroleum Company), and EMV (Vinto Smelting Company). The capitalization law was passed in March 1994, and by end 1995, the first four were capitalized with tenders totaling US $836 million. The program is scheduled to be completed in June 1997, and should yield US $1.5 billion or more in capital infusions. In addition, a new regulatory framework: SIRESI (System of Financial Regulation) was set up with a mandate to oversee the banking, pensions, stock exchange, and insurance sectors, as well as to provide supervision for the telecommunications, electricity, hydrocarbons, transport, and water service sectors. SIRESI is supposed to act as the independent guarantor of the rights of the state, the private operators, and consumers. The superintendents were selected by Congress, with presidential approval, for terms of 5 years in March 1997.

For the most part, the revenues generated by the program exceeded the government's initial expectations. In the capitalization of ENTEL, for example, the book value of the company was US $130 million prior to bidding. The Italian firm STET International bid US $610 million, committing the company to invest that amount in the country's telecommunications network in six years. The company agreed to invest a certain percentage in rural telephone service, which is next to non-existent in Bolivia, as well as to meet targets for the provision of public telephones, new installations, and new equipment. In exchange the company received exclusive rights for long distance telephone calls for 6 years. In November 1995, STET made a deposit of US $610 million in ENTEL's account to achieve all the time frame obligations. The net worth of the company is now US $742 million.[47]

The capitalization of ENDE, the state electricity company, was completed in August 1995. The company had a book value of US $99 million, but the 50 percent share was sold at US $139 million, increasing its book value to US $238 million. The company was split into three generating companies: Corani, Valle Hermosa, and Guaracachi, which were sold to three different strategic investors, all from the U.S.: Dominion Energy, Energy Initiatives, and Constellation Energy Consortium. LAB's book value was US $24 million and the 50 percent share was bought for US $47 million by a Brazilian company, Viacao Aerea Sao Paolo (VASP), an agreement which included the supply of a certain number of new airplanes and usage of some of VASP's air routes. ENFE, the state railroad company, was valued at US $52 million and the controlling share was bought for US $39 million by Empresa Cruz Blanca, a Chilean company. In exchange for exclusive rights for 40 years, the company agreed to a certain level of service provision in addition to the investment made in the company.[48] While ENFE was probably the least profitable of the state-owned industries, it was one of the most contentious capitalizations, as it was bought by a Chilean company. As Bolivia's access to the sea was lost in the nineteenth century war of the Pacific with Chile, there was a fair amount of political opposition to the national railroad being bought by Chileans.

The hydrocarbons law was passed in April 1996, and authorizes YFPB to enter into joint venture contracts. By mid-1997, part of YFPB was capitalized in three separate parts, while the state retained ownership of the extraction branch of the industry, which was the largest branch with the strongest union and the most workers. Enron-Shell purchased the transportation sector of YFPB, Transredes, which included an agreement to invest in the completion of a planned natural gas pipeline to Brazil. The two exploration units, Empresa Petrolera Andina and Empresa Petrolera Chaco were sold to YFP Perez Compano-Plueptrol Bolivia and Amoco Petroleum Company respectively. The three capitalized sectors of YFPB had a joint book value of US $382,860,000, and the strategic shares were sold for US $834,948,000, raising the total value to over US $1.2 billion. Each of these three sectors has about 400 workers, while the extraction sector retains 3,500 workers, many of whom are redundant.[49] Finally, negotiations were ongoing for the capitalization of EMV (Empresas Minelurgicas Vinto), the smelting company for tin.

Workers were given preferential options to buy shares in the enterprises. They could buy shares at book value and in an amount equivalent to the value of their social benefits (such as pension contributions and disability insurance). For the most part this was a highly profitable venture, and worker participation was quite high, ranging from 95percent of workers in ENTEL to 59.63 percent of LAB workers. In one of the least profitable capitalizations, LAB, workers received US $42.24 per share, or 105 percent over the book value. In the first twelve months of the program, over 15,000 workers participated in the program by purchasing shares in their companies, thereby creating a significant number of new stakeholders in the privatization process.[50]

Social Security Reform

There were two primary reasons for including a social security reform in the capitalization scheme. First of all, one of the central objectives of capitalization was to increase the growth potential of the economy. An immediate distribution of the proceeds in a country as poor as Bolivia would have resulted in a significant consumption increase, but in little new investment. At the same time, there was no existing investment channel for the resources that were being transferred from the state-owned enterprises that would yield universal benefits. The new pension system could serve as such a channel and had the potential to develop capital markets as well. Secondly, the existing public social security scheme was on the brink of bankruptcy, had very low coverage of the economically active population, and had a very low contribution rate even among the affiliated population.

The public social security scheme covered 314,437 or 2.8 million economically active employed workers in the labor force, a coverage of 10.8 percent of this group, and of 10.4 percent of the economically active population. The dependency ratio was 3 to 1, which was to become financially unsustainable in the near future. In addition to the primary public scheme were 36 complementary pension funds, which were industry or sector specific, to which workers and employers made additional contributions. The complementary funds were, for the most part, riddled with corruption and administrative inefficiencies, and over twenty of them had less than one year's reserves.[51] The reform set up two types of funds. The Individual Capitalization Fund (FCI) collects all individual contributions from workers. The Common Capitalization Fund (FCC) is built from the shares that Bolivians own in the capitalized enterprises, and uses the dividends from the shares to pay the Bonosoles. The fiscal costs of the reform, in 1997 present value terms, was an estimated US $3.395 million, while the implicit debt of the existing pension system was US $2.219 million.[52]

The reform eliminated the complementary funds, and established a single (and lower) contribution formula for all workers: 10 percent for pensions, 2.5 percent for life insurance, and 0.5 percent in commission to the AFP's, a total of 13 percent. Under the previous system the average contribution rate was 14.82 percent. Employers no longer contribute, but are required to raise individual salaries to account for the 4.5 percent that they contributed under the old system.[53] Two private pension funds were established in a competitive bidding process, Banco Invesco Argentaria and Banco Bilbao Viscaya. For the short term, each was given exclusivity over half of the rural areas in the country, as the rural market is considered too small and costly to reach to establish a competitive process from the start. In the larger urban areas, the pension funds are allowed to compete, although workers are initially assigned to one or the other.[54] Urban workers are allowed to switch from one AFP to the other, but only once a year. This is intended to avoid the excess switching that occurred in Chile, resulting in excess expenditures on advertising and higher commission costs.

The Bolivians found innovative solutions to two issues which have proven politically contentious in many countries. The first of these was the retirement age. Rather than set a retirement age or enter into political difficulties over raising it, the Bolivian system allows all workers to retire when they have contributed enough to accumulate a pension that is based on 70 percent of their average salary. If they have not done so by the time they are 65, they are allowed to retire and draw on whatever pension they have accumulated. This circumvented a contentious debate over raising the retirement age. Under the old system, the retirement age was 55 for men and 50 for women.[55] Critics pointed to the life expectancy of sixty years, which meant that the average person would not live until a retirement age of 65. However, as is noted above, life expectancy in Bolivia is very much influenced by the high infant mortality rate, and most of those that do live beyond their first year live longer than sixty years. Life expectancy for those who retire at 65 is 13 years.[56]

The second issue was that of a minimum pension. As in other poor countries like Peru, establishing a minimum pension was not feasible in the short term due to fiscal constraints, as too many workers would require a government-subsidized minimum. Another potential problem in both countries was that the existence of a minimum pension guarantee would encourage independent workers to under-declare income and make very small contributions to their pension accounts in order to qualify for the minimum.[57] Yet a major difference in Bolivia is that the Bonosol serves as an effective minimum pension for the first cohort of workers in the new system. If the pension system develops well, increases its number of contributors, and has high returns, and if wage levels gradually rise, it may be more feasible to introduce some sort of minimum by the time the post-Bonosol generation retires. (All Bolivians 21 years or older by end-1995 are eligible for Bonosol, and the last Bono is expected to be issued on or around the year 2060).

Hopefully the new pension system will be able to increase revenues from contributions. In the previous system the contribution rate was very low among enrolled workers, in part due to the incentives for evasion created by the large number of complementary funds. It is likely that merely simplifying the system and introducing better incentives (slightly lower payroll taxes, higher returns, and individual savings accounts) will raise the contribution rate among enrolled workers. Attracting informal sector and rural workers to the scheme will be more difficult, as it would be in any country. Low-income workers facing day to day liquidity constraints are unlikely to voluntarily join a forced saving scheme. Yet the absence of adequate alternative savings mechanisms for the poor in Bolivia suggests that the system might have appeal for some independent workers, particularly in rural areas where bank presence is very weak.[58]

Upon retirement, workers have two options which resemble those in the Chilean system. The first is to purchase an annuity from a life insurance company. The second and similar option is to purchase an annuity from the AFP, which functions like a group insurance scheme, and which spreads out the funds over the expected life-span of the pensioner in variable amounts. Those workers who have not contributed enough to earn a pension that is 70 percent of their salary by the time they are 65 cannot exercise either of these two options, but instead will make monthly withdrawals from their accounts. The amounts allowed for withdrawal will be determined by a formula set by the AFP's and the pension superintendency which accounts for life expectancy and number of dependents.

The reform of the social security system met initial opposition from several groups, even though it was publicly known that the complementary funds were bankrupt, and that the state system was increasingly vulnerable. The strongest opposition came from the administrators of the complementary funds. Given the widespread allegations of corruption in their management, they feared the consequences of audits of the funds as well as losing access to rents. Another vocal force in opposition was the association of retired persons within the COB. The COB called a twenty-four-hour strike in November 1996 in an attempt to stop the reform, but was unable to muster sufficient popular support to alter or delay the reform.[59] In part this was due to the COB's mixed position towards the complementary funds: some in the COB leadership initially had been opposed their being set up as independent units, and wanted to control the management and resources of these funds. Another reason for limited opposition was that workers were poorly treated under the previous system, and had little reason to oppose change. They were often forced to pay administrators bribes in order to obtain the documentation necessary upon retirement to begin to withdraw their pensions, for example. Opposition from the fund managers gradually subsided, meanwhile, in part because of an explicit government policy to find the workers in the fund administration in the new system where possible.[60] The need to identify and issue identity cards for all Bolivians over 65, many of whom did not have them, created new demand for administrative skills, as did the new private pension system and its regulatory wing.

A problem that was evident throughout the transition was lack of sufficient information about the new system, both for individual workers, and for those in administrative positions in the old system.[61] While the difficulty of providing adequate information is unique neither to Bolivia nor to pension reform, it makes reforms more vulnerable to irresponsible accusations from the opposition, such as the warnings in Bolivia that social security was being eliminated altogether.

The new AFP's, meanwhile, clearly were entering into uncharted territory. A major issue was time pressure. The social security reform law was only passed in November 1996, and the bidding process to authorize the operations of the AFP's was only completed in January. Yet the government wanted to complete the process of capitalization by the end of its tenure in June 1997, and to have the AFP's operational. In particular, it wanted to issue the Bonosol in May, not surprisingly coinciding with the June elections. But this created an enormous amount of pressure on the AFP's to become operational quickly, and in a situation where they had very poor information about the pre-existing system, including about the identity and level of contributions. This obviously posed a challenge to the issuing of adequate recognition bonds, as well as to contracting the necessary personnel.

A potential problem for the AFP's was that the initial calculations for Bonosol payments may have been too generous - US $246 per person per year. With 240,000 beneficiaries (at minimum), the AFP's had to pay out slightly over US $59 million per year in their first years of operations. At least initially, the AFP's are dependent on the dividends from capitalization for 95percent of their working capital. There is an obvious risk entailed for the AFP's if the capitalized enterprises do not earn a sufficient return. According to the law, the fund itself is supposed to grow for the first thirty years, and then its capital begins to get distributed, and must be consumed with the decease of the last Bonosol recipient.[62]

Another risk for the AFP's was the opposition's position towards the entire reform. Most observers predicted an opposition victory by the ADN candidate, Hugo Banzer (and his much more dynamic running mate Jorge Quiroga) in the June 1997 elections. The ADN's campaign platform explicitly states that the dividends from capitalization should have gone to health and education rather than to pensions. While it is unlikely that once in power the ADN would risk damaging the country's reputation in the international community by reversing the reform, their comments as opposition clearly created a sense of uncertainty. Finally, as by law the AFP's have to invest current workers' contributions, and they still have to pay current retirees, they are unlikely to generate profits in the short term. Current retirees will receive their rents from the national treasury. AFP's, meanwhile, are contractually obligated to buy bonds issued by the national treasury for that purpose and for other fiscal costs relating to the reform, in an amount that cannot exceed US $180 million per annum. Their primary opportunity for profit in the short term is to enlist new subscribers in the system, and in the life insurance market, which is underdeveloped in Bolivia. Also, given the small size of the market, their investment was minimal, and marketing costs very low given that the two funds each have exclusive rights in much of the country.[63]

The government clearly wanted to complete the capitalization program before it left office. Yet the pressure to complete the program prior to the elections also posed a risk, for example trying to set up the AFP's too hastily in a sector where the devil is often in the details. In addition, investors in some of the capitalized enterprises saw the electoral pressure as a sign of future instability. In March of 1997, for example, ENTEL, the capitalized telecommunications firm, threatened to reduce the overall amount of its investments from US $170 million to US $120 million for 1997 due to uncertainty created by the opposition's threatening to renege on the government's commitment to grant the company exclusive rights to the telecommunications market for six years.[64]

As with all major structural reforms, there will be obstacles, which are complicated by the timing of the elections and the extent and complexity of the reforms. Yet the reforms' potential to dramatically change the savings profile in Bolivia, as well as to generate growth in the longer term is impressive. While some observers argue that the savings in new pensions funds merely crowds out alternative forms of savings, this seems less likely in a country with as few alternative savings schemes as in Bolivia - alternatives which are particularly scarce for the poor. In addition, if the investments in the capitalized enterprises generate new employment and better salaries, savings could also increase.[65]

The reform should also, without a doubt, have immediate effects on growth, given the size of the new investments relative to the size of the economy. Some observers predict growth increases on the order of 6 to 8 percent per annum by the year 2000 (versus the projected 4 percent rate). At the least, as Laurence Whitehead has noted, an investment of US $1.7 billion (or US $2.4 billion if enterprise debt is taken into account) by efficient international corporations into an economy of roughly US $6.4 billion should have some positive effects on growth. And the projected US $50 million annual pension payout is a significant consumption boost in an economy with a total personal consumption of approximately US $4 billion per year (and is equivalent to about 10 percent of fiscal revenue).[66] The capitalization could also have positive effects on the national savings rate: given the extent to which workers formally enrolled in the previous system were not contributing, the margin for increasing savings is quite high. Domestic savings was under 2 percent of GDP in 1992-94, which is extremely low by international standards. If the AFP's accumulate dividends of US $200-300 million per year, as is projected, this would increase the national savings rate to 5 percent of GDP.[67]

Equity Issues

By relieving the government of having to support loss-making SOE's, the reform makes more revenues available for essential social expenditures. The government budget was 6.4 percent lower in 1996 than it was in 1995, yet social spending (health care, education, sanitation) received three times more than what was spent on state-owned enterprises. In contrast, in 1994, SOE's received more than all social expenditures combined.[68] The positive effects from this revenue substitution effect, combined with the country's desperate need for more savings and investment to generate growth, make a strong case for the equity choices made by the government. Investing the proceeds from the SOE sales immediately in health and education would clearly have provided a human capital dividend, but there would have been no savings and investment effect. And concurrent to capitalization, the government was investing resources and political capital in the social sectors, through the education reform and the participation program. While there is no doubt that both of these efforts could benefit from increased resources, it may well be more effective to wait until the reforms are operational prior to deciding the level of additional resources necessary and how they should be allocated.

The Bonosol, meanwhile, will serve as a major income increase for rural families. Most elderly in Bolivia, particularly in rural areas, do not live alone, which suggests that the Bonos will be redistributed within poor households and serve as an important income supplement. One of aims of the program was to increase respect for the elderly in Bolivia, as a large percentage of them live in poverty.[69] In addition, if the 4.1 million Bolivians living below the poverty line benefit more from the transfer than the 3 million that are not poor, then the transfer will be a progressive one, although to some extent this outcome depends on the unresolved issue of the life expectancy of the poor. Intuition suggests that the wealthy are likely to live longer than the poor, and thus a seemingly valid criticism is that wealthy Bolivians will receive Bonosol transfers for a longer period of time than poor ones. Yet the data available to prove this is far from complete. And it is difficult to gauge whether the costs - both political and administrative - of attempting to "target" the Bonos to the 70 percent or so of Bolivians that are poor, as opposed to making it a universal transfer, would outweigh the benefits. Targeting is most simple administratively when the poor are a small, and easily identifiable group, which is clearly not the case in Bolivia. Finally there was a political rationale for distributing the assets of the state-owned enterprises on a national scale - to all Bolivians. Still, there may be both equity and efficiency gains from some targeting of the benefits, given Bolivia's skewed income distribution.

The Politics of the Capitalization Program

Regardless of all its merits, the capitalization program was not particularly popular. Many observers have commented on how much more popular the program is outside Bolivia than inside the country. Initial support for the capitalization program was limited to the governing party, its allied parties in the government, and the business sector. The major opposition parties, the MIR and ADN, which had supported the genesis of the program when they were in power, became vocal opponents when the program was implemented. The ADN's position was that a traditional privatization, with the revenues invested in expenditures such as health and education, would have been more efficient. The MIR, meanwhile, criticized the selling of the national wealth, as did other parties of the more radical left and the populist CONDEPA. Organized labor was strongly opposed to individual capitalization of state assets on ideological grounds.[70] In the President's own words: "The political cost has been almost immeasurable for the party and the president...The only thing left is credibility. People think we are going to get it done."[71] This is in sharp contrast to the Popular participation program, which despite some initial reservations on the part of the opposition, soon became widely popular.

There are several explanations for the program's lack of political appeal. The first is its sheer complexity. The average person on the street just does not understand the concept of capitalization, which is no surprise given average education levels in Bolivia, and that even some international investors had difficulty understanding the process at times.[72] The lack of public understanding was exacerbated by the government's failure to adequately communicate the program, a failure which is also recognized within the government. The government's publicity campaign, which was limited to short and sporadic announcements on television, was too technical to convince the average citizen, much less to generate active support for the program. They relied on Chilean advisers for the publicity campaign, and the rather glittery logos that the publicity campaign used failed to appeal to the average Bolivian. Instead it reinforced its public image as concerned with efficiency and with capital markets at the expense of the poor.[73] And thirty second television slots were just too short a period in which to explain the reform.[74] The government was unable to adequately respond to the disinformation campaign that the unions launched, for example. The unions relied on scare tactics, telling workers that they were going to lose social security altogether. Some of the public understanding problem will be resolved with time, as the system gets up and running, and public familiarity and confidence in it increase. Yet there will be continued need for better public education about the system for this to occur and to maximize the potential positive effects.[75]

Secondly, it would be difficult to make any program which foregoes immediate consumption for long term investment popular in a country with so much poverty and so much immediate need. The opposition made this theme central to its criticism of the program, arguing that resources going to pensions in a country with hunger and illiteracy made little sense. Thirdly, implementing the program involved challenging powerful labor unions in sectors such as hydrocarbons and mining. These unions were for the most part united in their opposition to both the capitalization and education reforms. Their slogans, such as individual pensions eroding national solidarity in the social security system, were politically catchy, if factually incorrect.

Still, there were limits to the unity of the opposition of the organized labor movement. The radical and often intransigent stance of the COB on many issues was increasingly perceived as against the interests of individual workers by the workers themselves. This was demonstrated by workers' response when shares in the newly capitalized enterprises were issued: while the COB was strongly opposed, individual workers realized that they had a strong material interest in buying shares, and a large majority did so.[76] Workers in some of the capitalized enterprises were also quite receptive to new differentiations in pay scales, based on quality and output, despite strong opposition from the unions and from administrative personnel in the enterprises.[77] A related trend is that the umbrella power of the enterprise-wide unions was eroded as the capitalized enterprises were split up into branches and sectors to be sold, and branch-level negotiations took on much more importance. There were wide variations among the positions and strategies at the branch-level. Those unions in the more efficient, less political, and quickly capitalized enterprises, such as ENDE, tended to have more of a stake in taking a cooperative stance, while those in the less efficient sectors - where there was also more corruption - such as the extraction branch of YFPB - accurately perceived that they had more to lose from capitalization, and tended to pose more formidable opposition.[78]

Regardless of strong initial opposition to the program, it is likely that the longer run evaluations will be more favorable. Given the likelihood of an opposition victory in June, which would continue the rotation of parties in government since 1985, the program may be a wise investment in Sanchez de Lozada's political stakes in 2002, as well as in Bolivia's growth. Once the Bonosol system is operational, it is also likely to improve popular evaluations of the program. The first Bonos were to be issued in May 1997, and those people who did not have their identity cards were given a five-year grace period to obtain them, with the Bonos for those years issued retroactively.[79]

In the long term, the success of the entire process depends on a certain level of political stability, and therefore ultimately on a broad level of support for the program. While most investors - both in the capitalized enterprises and the AFP's - were fairly confident in stable economic and political trends for the foreseeable future, many of them still feared the effects of highly partisan politics, as well as fairly strong populist political tendencies, as a potential threat to the process.[80] ENTEL's uncertainty about proceeding with its planned investments because of the campaign rhetoric, for example, highlights the extent to which building broad-based political support for the capitalization process will be key to its success.

Finally, any political evaluation of the effects of the capitalization program should take into account the overall policy context in which it was implemented, and in particular that of the highly popular participation program. While capitalization may have been politically unpopular because it sacrificed immediate consumption for long term investments, participation provided immediate and substantial reallocation of resources to the local level, and had revolutionary effects on the way that social services were delivered.

Creating New Stakeholders and Spreading the Wealth: The Popular Participation Program

The popular participation program is one of Latin America's most dramatic experiments in decentralization, in which the devolution of resources and responsibility to the local level has been extensive. As can occur with all experiments, the results thus far are mixed, mistakes have been made, and there is a tremendous amount of learning by doing. Regardless, the program has had important and positive effects on equity, and at the same time has created a broad base of new stakeholders among poor Bolivians, who now have much more voice and choice in how their public services are allocated than they ever did in the past.

The Popular Participation Law (PPL) was passed in April 1994, and important accompanying legislation, the Administrative Decentralization Law, was passed in January 1996. Prior to the passage of the law, provincial and department capitals were the only municipal governments, and general tax revenues were allocated to municipal governments on the basis of the distribution of tax payers. As a result, most municipal government expenditures were concentrated in urban areas and in particular in the nine department capitals. With the passage of the PPL, the level of general tax revenues going from the central to the local level was raised from 10 to 20 percent (approximately US $21 per person). The law stipulates that 85 percent of co-participation revenues must go to investments rather than to operating expenditures.[81] In addition, the expenditures are now allocated on a per capita basis. This resulted in the formation of 250 new municipal governments, raising the national total from 61 to 311 functioning municipalities. Prior to the law, many municipalities had governments in name only, as they had no operating budgets. The law also gives municipal governments increased facilities for generating local revenues. The law devolves all non-payroll responsibilities of the health and education ministries to the department level. And for the first time prefectoral governments are advised by and are financially accountable to elected representative councils. Finally, one of the most important innovations of the PPL is its legal recognition of local grass roots organizations, such as indigenous and community organizations and NGO's, which are called Organizaciones Territoriales de Base (OTB's), for the first time in Bolivia's recent history. The law gives them a formal role in the planning of municipal government investments through locally elected Vigilance Committees (VC's).[82]

The PPL emerged from the coordinated efforts of two distinct groups of intellectuals. The first of these is the foreign-trained technocrats in the Sanchez de Lozada government, who are concerned with the sustainability of market-oriented reforms. The second is a group of reform-minded intellectuals who are influenced by their exposure to various indigenous movements, as well as the "Katarista" peasant union movement, and are affiliated with a number of local NGO's. Both sets of actors are loyal to the President rather than to his party, and are part of a movement known as "Gonismo". The President himself, meanwhile, was apparently influenced by his experience with New England town councils. The law was a product of a discussion between these groups which excluded the political parties, and it was done in a series of confidential discussions in which the president was directly involved.[83] While this was effective in circumventing a potentially explosive political discussion and getting the law passed quickly, this so-called "reformism by stealth" contributed to an initial lack of understanding of the process and to the prevalence of disinformation that still plagues the implementation of the law, as well as the initially negative stance taken by the opposition parties. This suspicion was driven in part by a political context in which there was a great deal of confrontation between the government and the unions over other policies such as the education reform.[84]

Results

The immediate results of the law were impressive, and eroded most political opposition fairly quickly. In addition to the new municipalities, approximately 19,000 community or grass roots organizations (OTB's) in Bolivia received legal recognition, and Vigilance Committees (VCs) were formed in most municipalities. Less than 100 of these organizations had legal recognition prior to the implementation of the law. The amount of tax revenues transferred to the municipal level as "co-participation" revenue increased from 0.8 percent of GDP in 1993 (US $45 million) to 2.4 percent of GDP in 1995 (US $140 million), and the municipal share of public investment increased from 11 percent to 39 percent. Social investment (includes central government transfers and municipal co-participation investments) doubled from 1993 to 1995, and investment in education tripled. Prior to the law, the three largest capital cities received 90 percent of tax revenues. Since then, capital cities receive 50 percent and rural areas receive 50 percent. Clearly, from a legal, administrative, and political perspective, the Popular Participation Law is nothing short of a revolution.

The procedure for participation in municipal investment decisions has three stages. The first is the Municipal Development Plan (PDM). This is the most participatory stage of the public investment process. Grassroots organizations, such as unions, indigenous organizations, mothers' clubs, and other local level groups, hold a community level meeting to discuss local needs and formulate them into investment projects. Communities often receive assistance in elaborating the PDM from regional NGO's, the Catholic Church, and other local level groups. The second phase is the formulation of the Annual Operating Plan (PAO), which is the yearly investment plan, and entails a smaller group of actors. These included the mayor, the municipal council, and the VC. The Prefectural Municipal Development Units and the Secretariat of Popular Participation provide technical assistance for this process. The operating plan must be approved by the VC and the Finance Ministry (for technical approval), and is then included in the National Budget which is approved by the Senate. The VC's are also supposed to enforce the rule that no more than 10 percent of the budget is allocated to current expenditure. The final phase is the elaboration of municipal budgets, which is usually done by officials from the municipality.[85]

Not surprisingly, this process tends to filter community demands, amending or excluding initial community level proposals. This is particularly prevalent in rural municipalities, where agricultural, transportation, and irrigation needs tend to dominate at the PDM phase, but social sector investments tend to dominate in the final budget phase.[86] To a large extent this reflects the strong influence of matching grant funds on investment decisions in cash-strapped rural municipalities. While large urban municipalities (capital cities) rely equivalently on own-generated (30 percent) and central government co-participation resources (29 percent), rural municipalities on co-participation transfers for the majority of their funds (64 percent), and on donations for 18 percent of their resources.[87] The influence of matching grants was strengthened by a presidential decree, issued in January 1996, which requires municipalities to allocate at least 30 percent of their budgets for human development (health, education, water, and sanitation), and at least 25 percent to economic development (rural roads, electrification, communication, tourism, industrial development, and agriculture) to be eligible to receive national development funds and grants.[88]

There are also major differences in the kinds of investments made by urban and rural municipalities. While urban municipalities invest 68 percent of their resources in "urbanism" or urban infrastructure - such as plazas, streets, markets, and parks - and only 6 percent in education and 2 percent in health, rural municipalities invest the majority of their resources in the social sectors: 30 percent in education, 20 percent in sanitation, and 6 percent in health, versus 23 percent in urbanism.[89] There are several explanations for this. The first and most obvious is the greater influence of matching grants - which have strings attached - in small poor municipalities with less capacity to generate their own resources. Preliminary results (which are still subject to revision) of regressions of the variables influencing investment decisions find per capita transfers from the FIS to be the most important variable influencing investments in the social sectors. It is important to note that the effects of FIS matching grants were to "crowd in" rather than crowd out investments in the social sectors. For each additional dollar of FIS transfers, an average of US $0.55 per capita was invested in the social sectors by municipalities.[90]

The second reason is politics: investments in urban infrastructure are more likely to yield political payoffs in concentrated urban areas, while those in schools and health posts are more likely to have an impact in rural areas where there are shortages of such services and constituents are more dispersed. The number of grass roots organizations (OTBs) was also a significant variable affecting investment decisions. For each additional OTB, communities spent, on average, an additional US $0.86 per person on social investments and US $0.74 on education. While these groups only have a formal role in the first stage of the decisionmaking process, it seems that their lobbying power over latter stages increases where they are greater in number - and possibly in political strength. Another political factor affecting investment decisions was party affiliation. Municipalities governed by mayors from opposition parties were much more likely to invest in the social sectors than were those of the ruling party. One explanation is multi-collinearity: the MNR did better in large cities than in small rural towns in 1995, and urbanism predominates in the investment portfolios of the nine large capital cities.[91] Another may be that the political mandates of the smaller opposition parties tended to be more tenuous and derived from a number of constituencies, all of whom have competing demands for investments, and small investments in schools and health posts are more easily divided among a number of constituencies.

Not surprisingly, the implementation of the law has been far from simple, and the results have been mixed. One problem has been a poor - or at least mixed - project implementation record, at least in the first year of PPL investments. While municipalities made ambitious public investment plans for 1995, less than half were implemented. And while urban development projects had a 365 percent completion rate, education and health had respective rates of 40 percent and 47 percent. A major reason for the lower completion rates in the social sectors were bottlenecks and delays in the receipt of matching grants from the central government investment funds.[92] Delays of six months to a year in obtaining matching grants from the funds also resulted in a fair amount of popular disillusionment with the program, as expectations were, not surprisingly, raised by the participatory nature of the planning process.[93]

Perhaps the most obvious reason for a diversity in outcomes in the participation process is the diversity of the communities themselves. While some communities are relatively homogenous and coherent, others are much more heterogeneous in nature, with a number of different indigenous groups and competing - and sometimes conflicting - priorities. Resources which are allocated on a per capita basis may be a significant amount in a community which is fairly homogenous and can agree on priorities, it will be far less so in a more diverse one with competing demands for how funds should be allocated. In addition, there are differences in organizational capacity across communities. In some, traditional organizations such as unions play a major role and have links with grass roots organizations; in others there is conflict between these sets of actors. In north Potosi, for example, where rural unions are very strong, and feared that their influence would be undermined by the newly recognized OTBs, there were widespread protests against the law. In other cases, unions launched damaging disinformation campaigns, which slowed the process of legal recognition for grass roots movements. In other communities there is very little tradition of community organization, and local politics, to the extent that it exists, is dominated by one or a few powerful interests, such as large farm-owners.[94] In addition, the nature of indigenous communities themselves - their pre-existing hierarchies, their approach to cooperating with outside groups, their view of leadership - all have effects on how participation functions.[95]

A related reason for variations in implementation records is that small municipalities, because they have much less capacity to generate autonomous resources, are much more dependent on central government transfers and on matching grants from the FIS, and thus their expenditure decisions are very much influenced by external parameters. The FIS, for example, primarily funds education and health infrastructure. In general, the municipalities that have the capacity to generate their own resources invest those in sanitation and urban infrastructure rather than in investments in the social sectors. In very poor municipalities, the top-down decision-making mechanisms of intergovernment transfers tend to overwhelm the bottom-up grassroots lobbying mechanisms established by popular participation. While matching grants are essential for correcting equity imbalances between resource-rich and resource-poor municipalities, the latter have much less freedom in making investment decisions due to their dependence on the grants.[96]

There are often major asymmetries between the power of the mayor and that of the VC's. Mayors and the municipal council members are paid elected officials, and, since the onset of Popular participation, have an unprecedented level of resources to spend. Vigilance Committee members are not paid, and are often at a substantial disadvantage, particularly when they come from remote rural areas and have to deal with more experienced "urban" politicians. There have been several cases reported where mayors have attempted to influence over VC members through financial cooperation and even with physical threat and intimidation. And over-riding the mayor and soliciting a rapid response from the central government is far from easy for VC members, for whom lack of resources, transportation, and information can all pose significant obstacles to effective demand-making.[97]

In other cases, particularly where indigenous organizational capacity is weak, VCs were formed almost "on command" at the request of the mayor, and are not genuinely representative. There are also some legitimate fears that the imposition of new forms of organization is undermining some traditional indigenous organizations.[98] Regardless of these obstacles, the VCs have exercised their right of control over municipalities to a surprising extent. The committees are able to appeal to the central secretariat of participation - and ultimately to Congress - in cases where municipalities are not responding to their demands or are misusing funds. From the program's inception through May of 1996, 23 municipalities had their funds frozen for misuse by Congress, and five mayors were investigated.[99]

A recent study of the impact of VC's on municipal performance found that VC's had the most positive impact on municipal councils when there were strong VC's in opposition to elite municipal councils. Good performance was defined as likely to make social investments, allocating more resources to rural communities, and sponsoring more stable political coalitions. Weak VC's and/or situations where indigenous organizations were in charge of municipal councils and the VC's played a complementary rather than an opposition role made less social investments and had more political instability than in the case of strong VC's with elite municipal councils.[100]

Another issue is that while NGO's are critical actors, and often play an important enabling role at the local level, many of them are also highly political and have their own agendas, which have ranged to supporting particular parties at the local level to flat opposition to the reform and involvement in disinformation campaigns.[101] NGO's are more influential in rural than in urban areas, meanwhile, as in the latter they are less likely to have a monopoly or at least a strong influence over access to information and resources.

Political dynamics also differ significantly. When the program was first proposed, unions and opposition parties were suspicious that it was a means for the MNR to circumvent them and to increase its influence over grass roots organizations.[102] This proved not to be the case, as opposition parties maintained and even increased their influence at the municipal level vis-a-vis the MNR in the 1995 municipal elections. Unions, meanwhile, under the umbrella of the Asamblea para la Soberania de los Pueblos and in conjunction with parties of the left such as the MBL, have also increased their political position in local politics in some areas. Indeed, their effectiveness in attaining political representation via this mechanism in many cases turned the tables, as the unions went from being the primary opponents of the program to being in charge of the municipality that had to implement it program.[103] Not surprisingly, this reduced their opposition substantially. And while party politics have dominated the participation process in some communities, in other cases, community-based movements have been able to increase their influence vis-a-vis the parties in the process.

In part this reflects a development which is occurring in many countries in Latin America: local elections are increasingly distinct from national level ones, local leaders tend to be elected on local issues rather than according to partisan criteria, and the influence of parties is much weaker at the local than at the national level.[104] In the 1995 elections, for example, the MNR lost a lot of ground to new parties such as the MBL and the UCS, even though it retained its position as the party with the most number of votes. Many community and/or union movements, such as the ASP, ran in the elections under the party umbrella of groups such as the MBL. These parties, meanwhile, are well aware of their dependence on the grass roots movements for their political success. Some observers have referred to this process as “reverse cooptation”.[105] Among other things, this trend “may reflect the growing importance of a new kind of local politician who has his or her own electoral pull based on a local reputation for honesty and getting things done.”[106]

The fluidity of political power at the municipal level is also evident in the new process of censuring mayors. Beginning with the 1995 municipal elections, in cases where the mayor is not elected by a full majority, and is therefore appointed by the council, the council is allowed to censure the mayor once per year, and call for new elections. This occurred in one third of all municipalities in the year following the 1995 elections, and fifty of them actually voted in new mayors.[107] In Santa Cruz, for example, only 3 of 47 mayors were elected with a majority, and 5 of the 47 were censured.[108] With the inception of the program, mayors lost little time in exploiting opportunities for enrichment, such as using participation funds to secure kickbacks from contractors for themselves and their clients. But as a result, by the end of 1995, up to ten municipalities had their funds frozen by Congress for corruption.[109] All of this implies that while there are clearly attempts by the political parties to manipulate the process, the process itself, in conjunction with ongoing dynamics at the local level, has created new opportunities for new, local level actors to influence the political process as well. In this sense, popular participation is indeed generating a revolution, not only in how social services are allocated and delivered, but in democracy at the grass roots level.

Bottlenecks

While recognizing the important contributions that the program has made thus far, it is also important to recognize that there are several critical issues that remain unresolved. First of all, while the program has introduced a new institutionality for the delivery of social services, it is not yet clear whether it is adequate to implement desperately needed improvements in the social sectors. There is strong evidence that there are major bottlenecks in service delivery, as the poor implementation record of social sector investments suggests. In addition, the devolution of responsibility did not include responsibility for hiring and firing personnel. This makes it extremely difficult for municipalities to fully coordinate service provision. Remote rural municipalities, for example, have little recourse when centrally hired health sector personnel do not fulfill their responsibilities to attend rural health posts.[110]

A principal agent problem remains in the social sectors. In education, for example, the Ministry guarantees norms and standards, as well as maintains responsibility for hiring and firing, and deals directly with the union which has a monopoly over personnel issues in the sector. The financing for the sector is channeled through the Prefecture level for administrative and teaching personnel, and through municipal governments, which are directly responsible for infrastructure and recurrent costs. With the implementation of education reform, locally elected school committees will have some input in the management of schools and evaluation of teachers, which should help in reducing the principal agent problem.[111] In health a December 1996 law allowing the municipalities to contract additional health personnel alleviates the problem somewhat, although the personnel still are paid with central government resources. Directorios Locales de Salud (DLOS) were set up with the participation law as local level management boards to manage the administration of health services at the municipal level, and are comprised of the Department-level health director and representatives of the mayor and the VC. Yet these organizations face the same kinds of tensions and political pressures that the VCs do, which is obviously a constraint to their operating effectively.[112]

Under the current financing structure, there is also a great deal of diversity in social sector outcomes. At present there is great variation in the amount of resources that municipalities allocate to the social sectors.[113] In education, for example, eight municipalities assigned no resources at all to the sector in 1996, while in Tiraque in Cochabomba and San Joaquín in Beni, almost 100 percent of resources went to education. Absolute levels varied even more than the percentages of the budget did: Filadelfia in the department of Pando assigned US$402 per student, while in Poopo in Oruro invested US $0.40 per student, differences which reflect variations in percentage allocations as well as in levels of municipal resources and in student-teacher ratios.[114] These vast differences may be reduced somewhat by the 1996 decree requiring municipalities to invest at least 30 percent of their resources in human development in order to be eligible for matching grants and development funds, although thus far the decree has been implemented quite loosely.[115]

Resources allocated to health also vary considerably, with 37 municipalities assigning no resources at all to health, and others up to 65 percent, and absolute amounts ranging from US $0.17 to US $49 per capita. An important program in the health arena, which is run from the center and is increasing coverage of health care for mothers and young children is the National Health Insurance for Maternity and Childhood. The program has increased the number of births attended by health professionals and consultations for children under five with diarrheal and respiratory diseases. The response to the program has not been uniform, however, and the response rate has been higher in urban areas and in the lowlands, and much lower in the Altiplano.[116]

There is a need for a certain level of central government involvement and coordination for the effective operation of social services in a context as poor as Bolivia's. The education reform process, for example, has been implemented in isolation from that of popular participation.[117] While they are clearly two distinct reforms, there is also an important role for coordination between them. As with any reform, many of the details of how popular participation coordinates with the social sectors need to be worked out with time. Regardless, no decentralization is alone sufficient to resolve problems of access and quality of basic service provision, and in the short term it may even exacerbate them.

A second major issue which is not resolved by the Participation Program is that of poverty and equity. The program has entailed a substantial devolution of resources to poor areas. But rich and poor municipalities are treated equally, and poorer ones are at a significant disadvantage in terms of administrative capacity, which in turn are likely to affect the quality of services that are delivered. While diversity in outcomes is not necessarily negative, it may well be essential to incorporate some correctional criteria in the public investment formula which seeks to prevent poorer municipalities from falling into a poverty trap in which key services are markedly inferior and thus the opportunities of the poor are limited from the start.

The program has one tool to address problems of this nature: a training program to provide help in planning, administration and finance, which is run out of the Municipal Support Units in the offices of the Sub-Prefects throughout the country, and has held workshops in 280 of the 311 municipalities. Yet the training staff is young and inexperienced, and hardly equipped to make up for some of the existing - and significant - gaps in capacity. One example of these gaps is that eighty-five percent of OTB leaders are illiterate.[118] All of this points to a definite need for institutional strengthening at the local level, as well as for more accessible support services from the center.

The Future of Popular Participation

While the participation program has demonstrated that for the most part even very poor municipal governments can make sound investment decisions, the record also demonstrates that it is far more difficult to implement those decisions, particularly in the key social sectors. Local institutions - both municipal governments and the VCs, need support in areas such as administration and finance, as well as in the management of social services. While the FIS provides important infrastructure support, it does not address critical management issues in the social services area, such as personnel and curricula, as well as quality and coverage of services. At least in the transition period, there is a need for some sort of coordinating body which can identify gaps and bottlenecks in the operations of health and education services. UDAPSO, the Unit for Social Policy Analysis, which was originally set up in the Planning Ministry but is now in the Ministry for Human Development, would be a possible candidate to fill this role. At present the agency is marginalized and under funded, which threatens to squander an important - and rare - public sector capacity for social policy analysis.

Related to this is the issue of overall expenditure levels. Co-participation resources from the government were roughly US $140 million for 1995, and resources from the FIS were US $40 million.[119] These resources account for about 90 percent of all public investments in the social sector, as most of the central level expenditures go to salaries. While this level is an improvement over the levels of spending of the adjustment crisis years, they are still low in comparative terms. They are also relatively low if one considers that roughly US $48 million will be spent by the government on Bonosol transfers. Once major bottlenecks in the implementation of the participation program are identified, and the education reform is fully operational, an increase in expenditures will almost certainly be necessary to the desired improvements in the quality and coverage of social services.

Decentralization is often used as a panacea for desperately needed institutional reforms in the public sector. While decentralization can make important inroads in making service providers more accountable, as well as in making services more appropriate to local contexts, it cannot substitute for important reforms at the central level, where institutions such as health and education ministries still have irreplaceable roles to play in the setting of norms and standards, in monitoring performance, and in ensuring that certain essential services, such as vaccines, are universally provided.[120] To date such institutional reforms are far from complete in Bolivia. It is telling that the education reform is being implemented by the FIS rather than by the education ministry, and that personnel issues within the latter institution still remain its predominant concern.[121] While participation is a tremendous innovation, and promises to be a revolution in both local government and social service provision, its potential will be extremely limited - and could result in a fair amount of popular frustration - without an increase in capacity of central level institutions to respond to the demands and needs of new local level actors. The ongoing education reform is an important first step, but there is a long way to go.

Popular participation has resolved some issues but also has presented new challenges. Its greatest innovation is to allow for bottom up solutions to problems and challenges that until now have been addressed - ineffectively - from the top down. At the least, the government should be commended for exercising the political will necessary to implement the reform, and to convince a myriad of actors at the central level to transfer their resources and responsibilities to the local level. And “letting go” at the central level means a willingness to accept diverse and unexpected outcomes. Herein lies both the strengths and the weaknesses of the reform. Diversity is what allows local actors to use initiative, to express their preferences, to tailor policies to meet their particular demands, and what provides added incentives for these actors to contribute their efforts and their resources. Yet at the same time, it is the poorest and the least well organized communities which will have the most difficulties in taking the initiative and in providing their own resources. There is clearly a need for a strong central level role in correcting for major imbalances in equity, as well as to provide more general support and monitoring services in the social sectors. An active effort in this arena, which would play an educational as well as a surveillance role, would probably be more effective in improving the quality of social services than the existing legal provisions requiring specific budgetary allocations for human development.

Finally and more generally, the program has great potential to raise the awareness and participation of the average citizen in the ongoing economic and institutional changes in the country. Almost fifty percent of the population polled expressed support for the reform in 1996.[122] This support is likely to increase as initial implementation problems are corrected. The heightened awareness and expectations that have resulted from Participation should complement the activities of new AFP’s, for example, as they attempt to increase participation in a new savings scheme, as well as to identify all those citizens who are or will be eligible for the Bonosol payments.

Bolivia's Reforms in Comparative Perspective

Bolivia's popular participation and capitalization programs share traits with a number of reforms that have been implemented in other countries and are based on increasing voice and/or choice and broadening the base of stakeholders. Zambia, for example, has recently implemented a sweeping reform of its health system based on the devolution of responsibility for management of health services to locally elected health boards. User fees were introduced for some services as a means to generate additional resources, but more importantly to give users greater incentives - and leverage - in demanding accountability. Peru has implemented a similar reform for health posts in poor areas on a pilot basis. In the early 1980's, Chile implemented a reform of its education system, based on increasing choice through government-subsidized vouchers. Parents can use vouchers to pay for either public schools or privately managed schools that forfeit their right to charge fees. Variations of the Chilean voucher program have been implemented in a number of countries. Also in the 1980's, Chile led the world in implementing a private social security system, a system which now covers all new entrants to the work force as well as the majority of the workers previously in the public system. The reform, which now holds assets of US $25 billion or 40 percent of GDP, is often credited with raising the national savings rate. A number of countries, including Peru and Argentina, have adopted variations of Chile's scheme. Finally, several countries have attempted to broaden the base of participation in the privatization of state-owned enterprises. The Czech Republic's now-famous voucher privatization was one of the first such attempts in the transition economy context, and has been copied by a number of countries in the region. Peru, meanwhile, has implemented a program to encourage the low-income population to buy shares in the privatization process. The program gives people the option of buying shares in installments payable over three years, and at a guaranteed rate of interest.

All of these programs have had varying degrees of success at improving the function of previously defunct public service systems. In general, increasing the voice and choice of the intended beneficiaries of reform leads to services which are more efficient and more responsive to local concerns. Service coverage usually increases, while effects on service quality are less clear, in part because they are more difficult to measure. Programs intended to broaden the base of participation in privatization have, for the most part, solicited wide participation and broadened the base of support for privatization, while privatization has had a mixed effect on the performance of state-owned enterprises.[123] And once new systems are in place, beneficiaries tend to vote in favor of their continuation, as well as to resist government efforts to reverse the reforms.[124] This is no small achievement, given the inertia that often characterizes attempts at social service and other public sector reforms, in both developing and industrial country contexts.

It is too early to tell what effects Bolivia's reforms will have on performance and on politics. Given the state of public services prior to reform, it would be surprising if performance did not improve. While the government receives high rates of approval for the participation program, the political benefits of capitalization will not be clear for several years. This is not surprising, as most detailed programs of structural reform only gain gradual support as positive results become clear and beneficiaries' stake in the process increases. A direct income benefit such as the Bonosol - which is rare in this type of reform - usually generates at least some short-term support. In any event, it is likely that support for capitalization will increase when the Bonos are issued in late May. In the case of Czech vouchers, much of the initial popular support for the program was due to the income benefits that people earned when they sold off their vouchers. Those that held on to their shares, meanwhile, were more likely to vote in favor of market reforms in successive elections. In the case of the Bonos, the transfer will be an annual one for those over 65, and an anticipated one for those near retirement age, which together comprises a significant number of people. Thus it is likely that capitalization will generate more support for reform in the future than it has during its initial implementation.

The obstacles faced by the Plan de Todos reforms, as well as some of the equity trade-offs, are also similar to those faced elsewhere. In general and not surprisingly, countries with higher levels of poverty face greater constraints in administrative capacity. They also tend to have more difficulty soliciting the poor's active participation in the reforms. The poor are least able to afford transaction costs, for example. Such costs range from the time required to participate, to small costs such as an additional bus fare to attend a new school, or a marginal user fee for health posts, to marginal differences in social security contribution rates. Another constraint is lack of access to adequate information among poor groups.

Finally, income constraints often differentiate those who participated in reforms for short-term benefit versus those who became more permanent stake-holders. Attempts to create stakeholders face poverty-related constraints even in countries with flat income distributions, such as the Czech Republic. In the Czech Republic, roughly one-quarter of the population sold off their vouchers within a year for an immediate profit, and roughly half has sold off their vouchers since the 1992 implementation of the program. Early selling of vouchers corresponded with lower income and education levels and support for the left, while keeping shares corresponds with higher income and education levels and support for reformist parties.[125]

Two themes emerge from these results. The first of these is the difficulty of getting people to make long term investments when they face short-term income constraints, which explains the difficulty in getting poor independent workers to join new private social security schemes in countries such as Peru and Bolivia. Secondly, "give-away" schemes, which require little effort on the part of recipients to obtain benefits are more likely to result in quick sell-offs and therefore are less effective at creating stakeholders than those which require greater investments of time or money. The percentage of participants that kept their shares in Peru's citizen participation privatization scheme, for example, is much higher - over 90 percent after the first year - than it was in the Czech Republic, even though the population in Peru is much poorer. One reason is that the shares in Peru were not given away at below market prices; rather participants bought the shares at market value in installments and at preferential interest rates. In the Czech Republic, vouchers were purchased at well below the market value of the shares, and thus were easily sold off for immediate profit, and share ownership was ultimately concentrated among a small number of banks and funds.

The capitalization program avoided many of these problems by investing the bulk of proceeds from capitalization and distributing only the dividends. This stands in sharp contrast to most countries. In neighboring Peru, for example, President Fujimori used millions of dollars in revenues from privatization to build schools and other public works just prior to his 1995 re-election campaign. While these expenditures were politically popular and for the most part redistributed resources to poor, rural areas, many of them were also unproductive in the long term. Many schools were built in areas where there were no teachers to staff them, and the whole issue of education reform was completely bypassed by the government.[126]

The popular participation program also faced poverty and equity related constraints. The poorest villages, which have the least access to information and which lack administrative capacity, will have the most difficulty delivering decent public services. Unless the program is altered significantly, it is the very poorest people who will be marginalized from the process of public service reform, yet whose needs are the greatest. This has also occurred in several other countries. In Chile, for example, school quality in poor and remote municipalities was of much lower quality a decade after the reforms were in place than that in the rest of the country, where quality improved somewhat. In the 1990's, a program to correct for quality differences in the poorest schools was implemented as a response. In Zambia, the poorest half of the population was for the most part marginalized from the health reforms, due to lack of adequate information about user fee exemptions, as well as to haphazard implementation of the fees policy. And unlike in Chile, where those did not benefit from the reform could be easily identified and targeted, in Zambia, that group was a much higher proportion of the population, and was more dispersed throughout. In Peru, on the other hand, the same approach to health reform that was utilized in Zambia was much more effective, even among the poorest population.

All of this suggests that the differences in outcome among villages and regions in the participation program are predictable, and that the program may introduce new equity issues and challenges at the same time that it attempts to improve essential public services and local governments. For the most part these poverty and equity related constraints can be corrected for by government policy, as the Chilean experience suggests, but such policies will require resources and administrative capacity, and will take time in a country with poverty levels as high as Bolivia's. They will also require further government efforts to educate the population about the reforms. The public needs to better understand new participation mechanisms, as well as the importance of human capital investments in reducing poverty in order to make appropriate decisions about resource allocations for the social services.

Conclusion

Both capitalization and popular participation are extremely innovative reforms, and each has the potential to have far-reaching and positive implications. Both are also likely to make a contribution to sustaining Bolivia's economic reforms, although in different ways. The capitalization program, while not immediately popular, is likely to give a large number of people - workers and all elderly Bolivians - a direct stake in the new private pensions scheme and/or indirect stakes through the receipt of the Bonosol. In addition, if the program leads to new investments and increased growth and employment, it will also broaden the base of stakeholders. In the short term, however, the program seems to have generated as much opposition as it did support, and the government demonstrated an impressive level of foresight in pressing forward with its implementation.

In contrast, the popular participation program was widely popular almost immediately after its implementation. The program provided a significant transfer of resources to poor rural areas, and, more importantly, gave previously marginalized sectors a new channel for participating in local government and increased voice in the delivery of social services. There will obviously be some transitional problems, and the poorest municipalities will remain at a disadvantage in terms of implementation capacity unless the program design is altered somewhat. Yet a significant proportion of the population has taken an active role as stakeholders in the design and delivery of public services through popular participation, rather than being passive - and often marginalized - recipients, a dynamic which is likely to permanently transform local government.

The capitalization program will almost certainly have positive effects on growth. It is also likely - although less certainly - to increase the savings rate, which could also have positive effects on growth. In addition, by freeing state resources that previously went to support state-owned enterprises, more resources are available for essential expenditures in the social sectors, investments in human capital which should also have positive effects on equity as well as on growth. In addition, the transition from an increasingly insolvent pay-as-you-go social security scheme, while entailing some short-term costs, will reduce the state's future liabilities to future pensioners; lower the contribution rate for workers and encourage more consistent contributions; eliminate the contribution for employers, removing a potential disincentive to formal sector employment; and (presumably) pay better pensions and encourage new entrants to the scheme. Finally, until the last eligible recipient of Bonosol passes away in the middle of the next century, the program will transfer a significant amount of income to elderly Bolivians, the majority of whom are poor. It is also quite likely that the families of the recipients will also benefit. It is difficult to argue that the program will not have significant and positive effects.

That does not mean that the program is free of flaws or that all of the equity choices that were made were optimal. It is likely that wealthy Bolivians will live longer than poor ones, and therefore receive more transfers (on an individual per capita basis) than their poorer counterparts. Yet there are more poor Bolivians than wealthy ones, and in net terms the poor will probably receive more. Making the benefits universal may be politically appealing and is in keeping with the government's overarching political slogan for its reforms, the Plan de Todos. Yet in the future it may be worth considering the elimination of benefits for Bolivians over a certain income level - perhaps the top 20 percent, particularly if dividends from the capitalized enterprises are less than expected and the program has difficulty retaining the current level of transfers. Alternatively, the Bonosol resources designated to non-poor Bolivians might be re-directed to the social sectors, once the reforms in those sectors are fully implemented.

Participation popular is also not a panacea. Without a doubt, the program provides a substantial transfer of resources to poor areas and gives a vital impetus to local government. It has also created an important new base of stakeholders in the reformed system and will have far-reaching effects on social service provision, although these are far from straightforward. Clearly, the devolution of responsibility for service provision to the local level and the incorporation of the voice of users in the management of services has considerable potential, and has proven to be a successful approach in many countries worldwide. And public services were in very poor shape in Bolivia, leaving a great deal of room for improvement. However, there many new municipalities which lack sufficient capacity to fulfill their new responsibilities, creating bottlenecks in the provision of services which are key to the welfare and productive potential of the poor. Participation's per capita based resource allocation, while clearly an improvement from the previous taxpayer based allocation, does not provide additional resources for communities which are particularly poor or particularly heterogeneous, which creates many conflicting demands on a small pool of resources. In these cases, additional transfers from the center seem vital to the success of the program, and transfers in the form of training and administrative assistance may be far more important than resources.

Finally, the program has both had an effect on and been affected by partisan politics. It has certainly supported the trend towards more independent and performance-based voting at the local level, by giving local governments and organizations independent access to resources, freeing them of dependence on the governing party at the center. And to the extent that the participatory mechanisms of the program support independent decision making and influence, they are clearly positive. Yet there are also cases where the program and the local decision making bodies it has created are coopted by party politicians, or are debilitated by partisan rivalries. It is difficult to correct for such trends: in the end, politics is politics. However, the mechanisms that local groups have available for recourse in such instances need to be strengthened, so that such disputes do not discredit the entire process and, more importantly, so that the delivery of key services is not jeopardized.

All of the Plan de Todos programs, including the education reform, have altered the face of Bolivian politics and vastly increased the potential for improving the quality and coverage of the social investments that are key to growth and to poverty reduction. They have also generated a significant number of stakeholders with strong interest in maintaining the new reforms, reforms which will be important to economic growth and poverty reduction in the future. The political success of the reforms will not be judged by who votes for the MNR in 1997, but rather by the performance of the new social security system and by the development and vitality of the new local participatory mechanisms. Ultimately, it is through these mechanisms - and increased rates of economic growth - that permanent stakes in a reformed, market-oriented economic system will be generated in Bolivia.

END NOTES

[1]I would like to thank Kris McDevitt and Gualberto Rodriguez for excellent research assistance; Jeffrey Sachs of Harvard University for his willingness to support this research early on; Jose Valdez, Evette Lopez, and William Blacutt of the Bolivian Ministry of Capitalization for their invaluable logistical support and willingness to provide information about the capitalization program; and Ricardo Godoy of Harvard University and Ramiro Salinas from the National Secretariat of Pensions for helpful comments.

[2] See, for example, Sebastian Edwards, "The Disturbing Under Performance of Latin American Economies". Paper prepared for the Inter-American Dialogue Plenary Meeting, Washington, D.C. January 1997.

[3]See "The Backlash in Latin America: Gestures Against Reform", The Economist, 30 November 1996. For detail on how high inequality can lead to "populist" voting patterns, see Alberto Alesina and Roberto Perotti, " The Political Economy of Growth: A Critical Survey of the Recent Literature", World Bank Economic Review, Vol.8, No.3, 1994.

[4]The macroeconomic volatility of the 1980's was bad for both growth and distribution in the region. Without the reforms, the trends towards more inequality would have continued, and the distributional outcomes would have been far worse. See Juan Luis Londoño and Marcelo Szelesky, "Distributional Surprise After a Decade of Reforms: Latin America in the Nineties", Paper presented to IDB Annual Meetings, Barcelona, March 1997. See also William Easterly and Peter Monteil, "Has Latin America's Post-Reform Growth Been Disappointing?", Mimeo, World Bank, 1995. Latin America's second stage of reforms, meanwhile, provide a number of opportunities for increasing equity and efficiency at the same time. See Nancy Birdsall, Carol Graham, and Richard Sabot, eds., Efficiency and Equity Enhancing Reforms in Latin America (Brookings Institution/InterAmerican Development Bank, forthcoming).

[5]For the role of investments in human capital in growth, see Robert Barro, "Democracy and Growth", Paper presented to Harvard University and Universitat Pompeu Fabra Conference on Growth and Political Institutions, Barcelona, March 31-April 1, 1995. See also Nancy Birdsall and Richard Sabot, "Inequality and Growth Reconsidered", World Bank Economic Review, September 1995. For the role of institutions, see Carol Graham and Moises Naim, "The Political Economy of Institutional Reform in Latin America" in (Birdsall, Graham, and Sabot, forthcoming).

[6]Peru, for example, provides low-income groups the option to buy shares in privatized enterprises in small installments, payable over three years at favorable interest rates. For a review of a number of these strategies, both in privatization and in the social sectors, see Carol Graham, Private Markets for Public Goods: Raising the Stakes in Economic Reform (Brookings, forthcoming).

[7]For detail, see C. Graham, Safety Nets, Politics, and the Poor: Transitions to Market Economies (Washington, D.C.: The Brookings Institution, 1994).

[8]The 1992 creation of a support organization within the Ministry of Planing, UDAPSO (Unidad de Analisis de Politicas Sociales) marked the intent of the government to incorporate the operations and approach of the FIS more permanently in the public sector. See Manuel Contreras, "Capacity Building in the Social Policy Analysis Unit in Bolivia: Reflections of a Practitioner" in Merilee Grindle, ed., Getting Good Government: Capacity Building in the Public Sectors of Developing Countries (Cambridge: Harvard University Press, forthcoming).

[9]With the implementation of the NEP and the dismantling of much of the public tin mining sector, from 30,000 to 7000 workers, the COB lost much of its power. As many miners went into

coca-growing activities, the COB was increasingly dominated by campesinos and teachers rather than miners. See "Bolivia: El Dificil Proceso de Transformacion", Dossier #57, Institute for European-Latin American Relations, Madrid, September 1996.

[10] The Nationalist Revolutionary Movement (MNR); the Nationalist Democratic Action (ADN); and the Leftist Revolutionary Movement (MIR).

[11]Macro-volatility tends to hurt the poor the most, as they have the least mechanisms to protect themselves from high inflation. Wealthier groups are able to transfer assets abroad and use other protective mechanisms through which they can not only protect themselves but sometimes even benefit from policy swings. Thus establishing macro-stability has equity enhancing effects. For detail across sectors, see Birdsall, Graham, and Sabot (forthcoming), and in particular the chapter by Ricardo Hausmann in that volume.

[12]Juan Antonio Morales, "Bolivia and the Slowdown of the Growth Process" in Leila Frishtak and Izak Atiyas, Governance, Leadership, and Communication: Building Constituencies for Economic Reform (Washington, D.C.: The World Bank, 1996), pp.15-16.

[13]ESF wages were at the average for unskilled construction workers. Comparative research demonstrates that it makes little sense from either a poverty relief or political perspective to concentrate all safety net benefits on relatively privileged "losers" in the process, as the tin miners were, as they are unlikely to be as well off immediately after reform as they were before, particularly given the levels of compensation that are available under the fiscal constraints of stabilization. See Graham (1994), chapter 3.

[14]The privatization law was passed in 1991, and allowed for the privatization of over 100 SOE's. Not more than 25 enterprises were privatized, and they were small in size, by 1994. [See A. Morales (1996)] A system of performance contracts between the Bolivian government and large, "strategic" state-owned enterprises was introduced in 1990 to help re-structure them into more efficient and competitive firms. See Richard D. Mallon, "State-Owned Enterprise Reform Through Performance Contracts: The Bolivian Experiment", World Development, Vol.22, No.6, pp.925-934, 1994.

[15]While total investment was equivalent to approximately 20% of GDP - a threshold value - in neighboring Peru, Colombia, and Ecuador according to recent IFC statistics, in Bolivia it was 6%. The weighted average for all developing countries is 23.4%. IFC report discussed in "Venezuela and Bolivia Rates Below Average", Knight-Ridder Information - Latin America News, March 7, 1996. Investments in human capital - education in particular - are increasingly recognized as key to sustainable economic growth. See, for example, Nancy Birdsall and Richard Sabot, "Inequality and Growth Reconsidered", World Bank Economic Review, September 1995; and Roland Benabou, "Unequal Societies", NBER Working Paper Series, No.5583, Cambridge, May 1996. Bolivia's rural illiteracy rate of 36% is closer to standards for Sub-Saharan Africa than for Latin America. See Sally Bowen, "Andean Struggle for Reform", Financial Times, 5 January 1996.

[16]I discuss this in detail, and the role of foreign aid in supporting or undermining domestic political consensus, in "Foreign Aid: Paved with Good Intentions", co-authored with Michael O'Hanlon, Foreign Affairs, July-August 1997.

[17]For detail on this point, see Rene Antonio Morales, "Bolivia's Silent Revolution", Journal of Democracy, Vol. 8, No.1, January 1997.

[18]The growth projections are from a CGE model constructed by UDAPE (Unidad de Analisis de Politicas Economicas), La Paz, 1997.

[19]As a point of comparison, in Peru tax receipts were 4% of GDP when Fujimori took over in 1990 and, as a part of the macroeconomic reform program, increased to 14.3% by 1996.

(Ministry of Economics and Finance figures, April 1997)
[20]Morales (1997); and Informe Nacional al Congreso, Republica de Bolivia, 1995-96.
[21]See A. Morales (1996).
[22]Morales (1997), p.151.
[23]Morales (1997).
[24] Nathanial Nash, "Bolivian Assured of Presidency as Foe Concedes", The New York Times, 10 June 1993.
[25]Initial support for both parties may have increased slightly at the time of their respective leader's death, out of "sympathy" or solidarity, as was demonstrated by the surge in support for UCS in the 1993 elections, and the massive turnout for Palenque's funeral in La Paz in March 1997. The personalist nature of both these parties' leadership suggests that this support is unlikely to last.
[26]In addition, the populist movement has not been particularly effective at mobilizing latent concerns about ethnocultural cleavages. In part because of the extent of reforms undertaken by the 1952 revolution, the primary trend in Bolivia has been towards an incorporation of Indian peoples on the basis of respect for diversity and traditional cultures, rather than towards Indian separatism. Sanchez de Lozada's Vice President, Victor Hugo Cardenas, is an Aymara Indian. See Morales (1997).
[27]The term of the president was also increased from 4 to 5 years. See Dossier #57, IRELA (1996).
[28]"Public Workers Riot in Bolivian Capital", The New York Times, 3 April 1996; and "Workers Bitter at Privatization of Bolivian Capital", The New York Times, 28 March 1996.
[29]The 60% figure is a UNDP estimate, cited in Dossier # 57, IRELA (1996). The 70% figure is slightly high, as it is based on basic needs indicators rather than income. See "Bolivia Poverty, Equity, and Income: Selected Policies for Earning Opportunities for the Poor", Report # 15272-BO, World Bank, Washington, D.C., 1996. See also Wilson Jimenez and Ernesto Yanez, Ingresos Familiares Urbanos en un Contexto de Crecimiento", UDAPSO, La Paz, April 1997.
[30]World Development Report, 1995 (Washington, D.C.: The World Bank, 1995).
[31] Dossier #57, IRELA (1996); and World Development Report (Washington, D.C.: Oxford University Press and The World Bank, 1996).
[32]Contreras (1997).
[33]Gary Fields, Jesse Leary, Luis-Felipe Lopez-Calva, and Ernesto Perez de Rada, "A Decomposition of Labor Income Inequality in Bolivia", Mimeo, Harvard Institute for International Development, Boston, April 1997.
[34]Manuel Contreras, "Genesis, Formulacion, Implementacion, y Avance de la Reforma Educativa en Bolivia", Mimeo, Harvard Institute for International Development and Universidad Catolica Boliviana, La Paz 1997.
[35]These figures are based on opinion polls conducted and elaborated by the Universidad Catolica in the major cities in the country. See Contreras (1997).
[36]Interview with Manuel Contreras, Universidad Catolica and Harvard Institute for International Development; former head of the Unidad de Analisis de Politicas Sociales (UDAPSO), La Paz, 11 March 1997.
[37]The difficulties of implementing institutional reform are discussed in Carol Graham and Moises Naim, "The Political Economy of Institutional Reform" in Birdsall, Graham, and Sabot, ed. (forthcoming).
[38]See, for example, "ADN: Lineamientos-Programa de Gobierno", La Razon, 12 March 1997.
[39]For the relationship between growth and poverty reduction in the region, see Michael Bruno,

Martin Ravaillion, and Lyn Squire, “Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues”, Policy Research Working Papers, No.1563, The World Bank, Washington, D.C., January 1996. For the role of investments in human capital, see the above, as well as Birdsall and Sabot (1995) and Benabou (1996).

[40]I discuss these issues in detail in Graham (1994).

[41]Interview with Eduardo Antelo, UDAPSO, La Paz, 10 March 1997.

[42]Apparently Sanchez de Lozada was also influenced by the U.S. experience in establishing social security in the aftermath of the Great Depression. Informal discussions with international advisers to the President, Cambridge, 30 April 1997.

[43]Interview with Alfonso Robello, Minister of Capitalization, La Paz, 11 March 1997.

[44]Carl Honore, “Modern World Closing in on Rural Bolivia: Many Lack Electricity, But They May Get Pensions”, Miami Herald, September 25, 1995.

[45]Ibid.

[46]See Carol Graham, “Voucher Privatization, Social Policy, and Equity in the Czech Republic: New Stakeholders in Reform?”, chapter in Private Markets for Public Goods: Raising the Stakes in Economic Reform (Brookings, forthcoming).

[47]Informe Nacional al Congreso, 1995-96; and Ministry of Capitalization statistics.

[48]Ministry of Capitalization figures, 1997.

[49] Interview with Hugo Vits, Bolivia Representative of Consorcio Enron/Shell, La Paz, 12 March 1997.

[50]Informe Nacional al Congreso, 1995-96.

[51]Figures from the National Secretariat of Pensions, La Paz, 1997; and Interview with Theresa Vargas, Director of Standards, National Secretariat of Pensions, La Paz, 12 March 1997. The estimated debt of the compelementary funds was $9 million. See Luis Carlos Jemio, “The New Pension System in Bolivia”, Paper presented to Harvard University seminar on “The Reform Process in Bolivia”, Cambridge, 30 April 1997.

[52]Jemio (1997). While the reform thus results in a net “savings”, there are obviously short-term versus longterm expenditure trade-offs involved.

[53]Under the previous system, the state paid 1.5% and the employer paid 4.5% of the 14.82% rate. Figures from the National Secretariat of Pensions.

[54]Interview with Jose Valdez, Sub Secretary for Promotion, Ministry of Capitalization, La Paz, 10 March 1997.

[55]Those in the banking sector could retire earlier, at 50 and 45 years respectively, but were required to make a greater number of contributions during their employment period. National Secretariat of Pensions data, La Paz, March 1997.

[56]National Secretariat of Pensions, 1997.

[57] Interview with Theresa Vargas, 12 March 1997.

[58]Interview with Theresa Vargas, 12 March 1997.

[59] Sally Bowen, "Pension Law Starts Bolivian Strike", Financial Times, 12 November 1996, p.10.

[60]Interview with Theresa Vargas, 12 March 1997; Interview with Elvira Lopez, Director for Consolidation of Complementary Funds, National Secretariat of Pensions, La Paz, 11 March 1997.

[61]Interview with Elvira Lopez, 11 March 1997.

[62]National Secretariat of Pensions, 1977.

[63]Interview with Jose de la Fuente, General Manager for AFP Banco Bilbao Viscaya, La Paz, 12 March 1997.

[64]"Entel Bajo Su Oferta de Inversiones Para el '97", La Razon, 13 March 1997, p.B4.
[65]Recent research suggests that the poor are more likely to make additional consumption sacrifices in order to save for their children's education if there are employment opportunities available which make those investments worthwhile. See Nancy Birdsall and Richard Sabot, "Inequality, Savings, and Growth", Mimeo, Williams College and InterAmerican Development Bank, November 1995.
[66]Laurence Whitehead, "Bolivia's Capitalization Programme: Taking Neoliberal Precepts One Step Further", Paper prepared for Ministry of Capitalization Conference, Miami, 12 April 1997.
[67] Ibid.
[68]Informe Nacional al Congreso, 1995-96.
[69]Interview with Jorge Blanes, Director, Centro Boliviano de Estudios Multi-Disciplinarios (CEBEM), La Paz, 11 March 1997.
[70] Morales (1996).
[71]"Change in Bolivia: No one Said it Would be Popular", The Washington Post, 17 June 1996.
[72]Interview with Hugo Vits, Local Representative for Enron/Shell, La Paz, 12 March 1997.
[73]Morales (1996).
[74]Interviews with Elvira Lopez, 11 March 1997; and with Jorge Harriague, Executive Director, Procurement Division, Bolivian Ministry of Capitalization, Washington, D.C., 6 May 1996. Even President Sanchez de Lozada cites inadequate communication - in part due to not having enough time - as being one of the major flaws of the program. He noted this in a presentation at the Brookings Institution, Washington, D.C., 2 May 1997.
[75]Interview with Claude Bessi, Superintendent for the Electricity Sector, La Paz, 10 March 1997.
[76] Interviews with Elvira Lopez, 11 March 1997, and Jorge Harriague, 6 May 1996.
[77]Interview with Hugo Vits, 12 March 1997.
[78]Interview with John Vega, Administrative and Financial Manager, Empresa Electrica Guaracachi, Santa Cruz, 13 March 1997.
[79]"Si Usted Tiene Mas de 65 Anos, Aliste Su Carnet de Identidad, el Bonosol Llegara el 2 de Mayo", La Razon, 13 March 1997.
[80]Interviews with Hugo Vits (Enron Shell), John Vega (Guaracachi), and Jose Maria de la Fuente (Banco Bilbao Biscay).
[81]The rationale for this is to encourage new investment, which will be matched by locally generated revenue to cover operating costs. By 2001, municipalities will have to allocate 85% of their own revenues to investment, a requirement which may be too high for effective operations, and at the same time impinges on the municipalities new autonomy by restricting their independence over locally generated resources. For a detailed discussion of this, see John Stith, "Strategies for National Influence towards Municipal Investment Decisions in Bolivia", Paper presented to the John F. Kennedy School of Government, Harvard University, and to UDAPSO, La Paz, Bolivia, April 1997.
[82]For detail see "Popular participation and Rural Decentralization in Bolivia", Report Prepared for Swedish International Development Agency (SIDA), La Paz, November 1996; and Fernando Ruiz Mier and Bruno Giussani, "La Decentralizacion y el Financiamiento de la Provision de Servicios de Educacion y Salud en Bolivia", Mimeo, UDAPSO, La Paz, 1997.
[83]Interview with one of the few observers of this process, La Paz, March 1997.
[84]SIDA Report (1996).
[85]For detail see George Gray Molina, "Social Investments Under Popular participation in Bolivia: Explaining Municipal Investment Choices", Mimeo, UDAPSO/HIID, La Paz, November 1996; and SIDA Report (1996).

[86]Gray Molina (1996).
[87]Gray Molina (1996). These figures come from a study conducted by the author and a research team affiliated with HIID and UDAPSO. They compiled a database of fiscal, political, social, and demographic traits of the 311 municipalities in the country from 1994-1996. They also conducted more qualitative field studies in 40 rural municipalities in 5 departments throughout the country. As always in cases where it is difficult to collect accurate and comprehensive data, a word of caution the accuracy of the data is in order.
[88]Nearly all municipalities met the first requirement in 1996, but only 47% met the economic development requirement, and only 37% met both. Enforcement of this regulation was very lax, however, and no municipality was officially cited as violating the requirement in 1996. See Stith (1997).
[89]Gray Molina (1996).
[90]Gray Molina (1996).
[91]Gray Molina (1996), and Interview with Gray Molina, La Paz, 11 March 1997.
[92]See O'Neill et al. (1996). There are several other funds in addition to the FIS, but in general they are fairly inefficient and ineffective. The Fondo de Desarrollo de Campesinsos, for example, spent more on operating costs in its first three years ($3 million) than in disbursements ($2 million), a track record which seems to support the frequent criticism that the fund is politicized and riddle with corruption. Interview with Nico van Niekerk, Special Adviser to the Economics Ministry for NGO Issues, La Paz, 13 March 1997.
[93]Interview with Hugo Frias, Director, Secretariat for Popular participation for Santa Cruz, Santa Cruz, 13 March 1997.
[94]SIDA Report (1997). In addition to its overall study, the report relies on in-depth field studies conducted in four "representative" municipalities. Also interview with Nico Van Niekerk, Special Adviser for NGO Issues, Ministerio de Hacienda, La Paz, 13 March 1997.
[95]The Andean tradition of "rotacion de cargos" or rotation of posts, for example, does not lend itself to accumulation of experience, and can be an obstacle to leadership development. And some indigenous communities have much more rigid internal structures, and are much more hesitant to cooperate in joint leadership structures than are others. See SIDA Report (1996); and Jose Blanes, Rolando Sanchez, and Jose Rodolfo Arias, "Impactos Socio-Politicos de la Implementacion de la Ley de Participacion Popular En Las Comunidades Rurales de La Paz, Mimeo, CEBEM, March 1996.
[96]See O'Neill et al. (1996).
[97]This was the case in Cotoca in Santa Cruz, for example, where, according to the president of the committee, the mayor sent a group of thugs to intimidate the Vigilance Committee, which was challenging his usage of public resources for personnel ventures. The committee's attempts to solicit a response from the center, meanwhile, received no response. Apparently a similar situation occurred in neighboring Puñate. Authors interview with Señora Tania Cronenbold Suarez, Vigilance Committee President, Cotoca, Santa Cruz, 13 March 1997. This account was confirmed by reports of similar instance elsewhere. See, for example, "Guarayos Muestra Su Rostro Indigena", La Razon, 13 March 1997, p.A12. See also Blanes et al.(1996).
[98]Interview with Jorge Blanes, CEBEM, 12 March 1997. Blanes cites instances where in polls of up to 50 campesinos in a rural La Paz municipality, not one of them knew a member of the Vigilance Committee. A more general survey found that 42% of those surveyed did know someone on the VC. See George Gray Molina and Carlos Hugo Molina, "Popular Participation and Decentralization in Bolivia: Building Accountability from the Grass Roots", Paper presented to Harvard Seminar to Evaluate the Reforms in Bolivia, Cambridge, 30 April 1997.

[99]IRELA Dossier #57 (1996).
[100]See Gray Molina and Molina (1997).
[101] In Santa Cruz, for example, some NGO's told people that they had a right to claim their per capita expenditure allocations individually, and that they could demand them from the program secretariat, which created all sorts of problems for the program administration. Interview with Hugo Frias, Santa Cruz, 13 March 1997.
[102] Interview with Torres Goita, MNR Senator, La Paz, 11 March 1997.
[103]One such example was in the municipality of Independencia in Cochabamba, where the rural unions were at the forefront of the opposition and disinformation campaign until March 1995, when, under the umbrella of the United Left and the Asamblea Para la Soberainia de los Pueblos, they defeated the MNR/ADN incumbents and took over the municipality. SIDA Report (1996).
[104]For details on this dynamic in Peru, for example, see Carol Graham and Cheikh Kane, "Opportunistic Government or Sustaining Reform: Electoral Trends and Public Expenditure Patterns in Peru, 1990-95", Latin American Research Review, Vol.33, No.1, 1988 (forthcoming).
[105]For details, see SIDA Report (1996).
[106]SIDA Report (1996), p.45.
[107]Interview with Hugo Frias, Secretary General for Participacion Popular for Santa Cruz, Santa Cruz, 13 March 1997.
[108]Interview with Hugo Frias, Secretary General for Participacion Popular for Santa Cruz, Santa Cruz, 13 March 1997.
[109]SIDA Report (1996).
[110]This problem is less marked in the education sector, as apparently teachers do attend their assigned posts. Interview with Hugo Frias. This problem was also noted by the President himself in an informal meeting in Cambridge, 30 April 1997. He noted the political difficulties entailed in devolving the responsibility for hiring and firing to the local level, difficulties which could have jeopardized the reform.
[111]See Ruiz and Giussani (1997). See also Manuel Contreras, "Genesis, Formulacion, Implementacion, y Avance de la Reforma Educativa en Bolivia", Mimeo, Harvard Institute for International Development and Universidad Catolica Boliviana, La Paz, 1997.
[112]Interview with George Gray Molina, UDAPSO, 11 March 1997.
[113]A recent study found that variables such as illiteracy, lack of health care, and shortages of water and sanitation services had no significant effects on the investment decisions of municipalities. See Stith (1997).
[114] Ruiz and Giussani (1997), p. 12. Ibid.
[115]For example, no municipality's 1996 budget was deemed in violation of the decree by the Finance Ministry. See Stith (1997).
[116]One criticism of the program is that excess rigidity in financing has led to a reduced quality of health care in certain instances.
[117]Interview with Jean Paul Faguet, London School of Economics and the World Bank, La Paz, 11 March 1997.
[118]SIDA Report (1996).
[119]Interview with Nico Van Niekerk, La Paz, 13 March 1997.
[120]See Graham and Naim (forthcoming).
[121]Interview with Manuel Contreras, former director, UDAPSO, La Paz, 11 March 1997.
[122]A July 1996 poll found that 48% of the population approve of the education reform, while 45% approved of popular participation. Nationwide poll conducted by the National Secretariat of Participation, cited in Contreras (1997).

[123]On political support, see Graham (forthcoming) and, on privatization performance, see Eduardo Lora, “A Decade of Reforms in Latin America: What Has Been Reformed and How to Measure It?”, Paper presented to InterAmerican Development Bank Annual Meetings, Barcelona, March 16, 1997.

[124]Case in point is Zambia, where the local level health boards were able to resist a new Health Minister’s attempts to reverse the reform and re-centralize power. In Chile, both education and social security reforms were maintained in place during and after a transition from authoritarian to democratic regime, and all subsequent efforts to improve education services in Chile have maintained the voucher system intact. See Graham, Private Markets (forthcoming).

[125]See the chapter on the Czech Republic in Graham, Private Markets for Public Goods (forthcoming).

[126]See Graham and Kane (1988, forthcoming).

BOLIVIAN CAPITALIZATION AND EAST EUROPEAN PRIVATIZATION: PARALLELS AND DIFFERENCES

by Josef C. Brada

Capitalization in Bolivia and privatization in Eastern Europe offer a number of parallels and differences whose examination can provide insights about the two processes that may be less evident when each process is viewed in isolation. At the same time, such a comparison must take into account the significant differences between the objectives of privatization and capitalization and, perhaps even more, the political, social and economic environments within which privatization and capitalization took place. In this paper, I examine the two processes, the conditions under which they were introduced, the objectives that policy makers sought to achieve, the congruence between ends and means, and the incentives that each process provides to bring about the desired ends.

STARTING CONDITIONS

In Eastern Europe, privatization was a key element of a major social and economic revolution. This revolution involved the dismantling of one-party dictatorships that controlled states that owned virtually all productive property and that allocated resources with scant regard for markets. The hope in East European countries was that the communist state would be replaced by multi-party democracies and by a private-property-based market economy that would bring with it improved standards of living.

Bolivia, on the other hand, was a multi-party democracy at the start of the capitalization process. Thus, while capitalization may be seen as the pivotal element of a shift toward liberal economic policies that, if pursued consistently and for a sufficiently long period of time, would bring about important social and economic changes, the Bolivian environment is, and was, one of greater social, political and economic stability.

The Political Environment

In some East European countries, the collapse of the communist elite was both total and long lived, and, as a result, privatization plans carried considerable long-term credibility, and the implicit strength of the new political parties enabled them to implement privatization programs that were successful in providing new outside owners, either domestic or foreign, for formerly state-owned firms. In other countries, however, communists either clung to power or were returned to office by electorates who grew disenchanted with the inexperience and shortcomings of non-communist parties. Even in some of these countries, privatization has nevertheless been pursued with energy, in part because, while non-communist parties were in power, they sought to privatize enough of the economy to make a return to state ownership impossible and in part because many ex-communist parties have not been willing to pursue a course of renationalization. Nevertheless, in most countries where ex-communists have clung to power or where the former communist system was not decisively repudiated, governments have followed weak privatization policies that lack credibility. Weak policies are reflected in little or slow privatization, especially of core industries and of large enterprises, and in privatizations that leave workers, managers, or a coalition of the two in control of their enterprises, with little or no ownership role for outsiders.

The speed of privatization usually has a decisive influence on the pace of other reforms, including price and foreign trade liberalization and the elimination of subsidies to industry. Thus, strong governments have been able to implement policies that are credible to their populations and to foreigners. Domestic credibility is vital, among other reasons because it encourages domestic agents to respond appropriately to the new environment. How credible privatization is to outsiders is critical if foreign investment is to play a positive role in economic restructuring. Weak governments that attempt privatizations are often hard put to implement programs that have much credibility. In part, this is due to the fact that their hold on power is tenuous, and thus there is concern that any privatization process will be altered or dismantled by future governments. Therefore, agents tend to take a wait-and-see attitude rather than responding to reforms. Moreover, weak privatizations tend to leave insiders in control of firms, leaving little scope for foreign investors. Table 1 shows the strong correlation between foreign investors' perception of risk and the extent of privatization in a number of East European countries.

Table 1:
Extent of Privatization and Country Risk in Transition Economies

Country	Private Sector Output as Share of GDP, 1995	Country Credit Rating, March, 1996*
Bulgaria	36	23.1
Czech Republic	70	60.1
Hungary	60	43.6
Romania	38	30.9
Russia	58	19.9
Poland	57	40.2
Ukraine	37	16.7

Sources: World Bank, World Development Report, 1996, Oxford: Oxford University Press, 1996; Institutional Investor, March, 1996.
* 100 is the highest possible rating, 0 the lowest.

In Bolivia, too, credibility of the capitalization program appears to have been an important consideration in its design. If foreign investors were to play a key role in the capitalization process, then they must have confidence that the franchise to operate the firms they buy is secure for the long term. Similarly, the sell-off of large parts of the economy to foreign investors must be seen by the electorate as a process with clear economic benefits and one that is carried out in a transparent and non-collusive manner. The institution of the Bonosol is a way of creating long-term credibility for the program because it creates, for a large proportion of the population, a personal stake in the continued private status of the firms included in the capitalization process. Moreover, future governments are not only constrained from renationalizing these firms, but, because the Bonosol depends on the financial performance of capitalized firms, future governments are also limited in their ability to over-tax these firms. In this sense, the Bonosol can be seen as a credibility-creating mechanism similar to the distribution of ownership shares to East European populations through voucher programs; once individuals who have no employment interest in privatized firms acquire a vested interest in privatization and in the performance of private firms, renationalization becomes more difficult.

The extensive involvement of foreigners is also a credibility-creating mechanism. Abrogating the rights of a large number of large, foreign-owned firms is more visible and more likely to lead to a significant foreign response. Consequently, in both Bolivia and East European countries such as Hungary, extensive foreign ownership of firms can be seen as a way of committing future governments to the viability of privately-owned firms because their failure to honor such a commitment is likely to cut off access to foreign capital markets and conceivably to generate conflicts with the foreign investors' home countries.

The Economic Environment

As table 2 demonstrates, Bolivia began the process of capitalization during a period of solid economic performance, having achieved one of the better records of economic growth in the region in recent years. Moreover, other economies in Latin America have also performed well, thus boosting the demand for Bolivian exports and strengthening investors' confidence in the region. In contrast, the process of privatization in East Europe began during a period of recession that, in some countries, rivaled the declines in output experienced in the Great Depression. The general economic boom in Latin American trade is a sharp contrast to the collapse of trade within East Europe and between East Europe and the former Soviet Union. Moreover, West Europe, while taking up an ever-increasing share of East European exports, has not been an especially dynamic region, and certain of the European Union's trade policies have hampered East Europe's ability to expand exports of so-called sensitive products to Western Europe. As a result, while new investors in Bolivian firms faced buoyant near-term prospects on both domestic and major export markets, those in East Europe faced falling output, high rates of inflation and a collapse of intra-regional trade. Moreover, large changes in relative prices made the future of many East European firms doubly uncertain.

Table 2:
Macroeconomic Indicators for Selected East European and Latin American Countries

	Annual GDP Growth 1990-1994(percent)	**Annual Growth of GDP Deflator, 1990-1994(percent)**
East Europe		
Bulgaria	-5.9	90.0
Czech Republic	-4.7	21.3
Hungary	-2.0	22.4
Romania	-3.7	191.9
Russia	-10.6	616.7
Poland	1.6	36.9
Ukraine	-14.4	1169.1
Latin America		
Argentina	7.6	27.6
Bolivia	3.8	10.9

Brazil	2.2	1231.5
Chile	7.5	15.3
Colombia	4.3	23.8
Source: World Bank, World Development Report, 1996, Oxford: Oxford University Press, 1996.		

Another important difference between Bolivia and Eastern Europe lies in the level of industrialization, which, in East Europe, was probably considerably higher on the eve of the transition period, as table 3 shows. This structural difference, combined with the fact that all, as opposed to some, of the means of production had been in state hands in East Europe, means that the number of firms available for privatization or capitalization in East Europe was much greater, and comprised a greater share of the capital stock, than was the case in Bolivia, as table 4 illustrates.

Table 3:
Structure of Production in Selected Latin American and East European Countries, 1994

	Share of GDP Produced by: (in percent)			
	Agriculture	**Industry**	**Manufacturing**	**Services**
Bolivia[a]	18	35	15	47
Ecuador	28	38	8	33
Paraguay	24	22	16	54
Peru	14	29	9	56
Bulgaria	13	35	NA	53
Czech Republic	6	39	NA	55
Hungary	7	33	23	60
Romania	21	33	NA	46
Russia	7	38	31	55
Poland	6	40	NA	54
Ukraine	19	50	38	31
Source: World Bank, World Development Report, 1996. Oxford: Oxford University Press, 1996. [a] 1980.				

Table 4:
Privatization Results in Some Central and East European Countries (End of 1994)

	Number of State-Owned Enterprises	
Country	**Privatized**	**Still in State Hands**
Bulgaria	23	1458
Czech Republic	4800	NA[1]
Hungary	955	823
Poland	1308	6533
Romania	600	8000
Slovak Republic	800	1000
Croatia	2421	NA

[1] While the number is by no means small, most Czech SOEs have been privatized.
Source: Podkaminer, 1995.

Finally, while the deregulation of sectors in which capitalized firms operate in Bolivia was likely to change both input and output prices, capitalization was carried out in an environment of both relative and aggregate price stability. In East Europe, uncertainty about future relative prices as well as about the ability of governments to reign in inflation made it extremely difficult to value firms or to generate much investor enthusiasm about their future. The end of central planning, of cheap energy imports from the USSR, and of policies aimed at promoting the development of heavy industry all augured for major structural changes in economic activity, with significant but hard-to-predict implications for individual firms.

An important similarity between Bolivia and East Europe was the need to develop a modern infrastructure to support economic growth. Telecommunications and transportation were in need of major investments. It was also commonly believed, especially in the early period of the East European transition, that huge amounts of capital were needed to restructure industrial enterprises. In East Europe, the decline in investment caused by the abrupt fall in output and the destruction of cash holdings by high rates of inflation led to concerns that domestic saving and capital accumulation would fall far short of the region's needs. In Bolivia too, the low rate of saving, perhaps in response to past inflationary episodes, was seen as a barrier to economic growth and development. Finally, the role of state-owned firms in the state budget was similar. State-owned firms were either subsidized or seen as sources of income for the state or for their employees or as a source of subsidized products for their customers. Moreover, managers of state-owned firms had neither the incentives nor the autonomy to strive for efficient operations.

Political Objectives

One argument for capitalization or privatization is that "capitalism is a necessary-though not sufficient-condition for democracy."[1] Thus, if democracy is to become or to remain a viable political system, the state's monopoly over the bases of political power must be broken to allow countervailing sources of political influence to emerge. Privatization is also a way of building political support for liberal market-oriented reforms. By creating property owners, privatization can create or strengthen a nascent middle class that has a stake in an effective system of property rights and in the pursuit of economic policies that would enable the private sector to flourish.

Managers of state-owned firms and former bureaucrats associated with the state-owned sector are powerful political force that can sabotage or block economic reforms or subvert them through their continued control over the operation of newly-privatized firms. Indeed, as Comisso argues, breaking up the network of economic regulation and rent-seeking that existed prior to privatization or capitalization must be a key political and economic objective.[2] In many transition economies, managers of SOEs have been able to loot, dissipate, or transfer to their own possession the assets of the firms they manage through so-called *nomenklatura* privatization. Such lawlessness undermines popular support for reform, strengthens and benefits those who represent the former regime, and weakens prospects for economic recovery. In Bolivia, the state also needs to protect capitalized firms from the old system of profit skimming and subsidization in order to ensure broad political support for liberal economic policies.

Thus, although in both Bolivia and East Europe capitalization or privatization had important political objectives, it is fair to conclude that these goals were far more explicitly articulated and felt in East Europe than in Bolivia. In large part, this is due to the more revolutionary nature of political change in East Europe. The greater political burden placed on privatization in East Europe had contradictory effects. On the one hand, the significance ascribed to privatization meant that, where new political forces held sway, privatization could be more extensive than it was in Bolivia. On the other hand, the potentially extensive nature of privatization raised fears on the part of workers, managers, and consumers that were likely to be greater than those that existed in Bolivia, thus serving to delay or sidetrack privatization efforts in other parts of East Europe.

Economic Objectives

The most compelling economic reason for privatizing SOEs in both East Europe and Bolivia is that it was widely agreed that as units of production, as distinct from providers of secure employment, these firms were a failure. Private ownership was thus seen as the means of unlocking potential gains in productivity, both by stimulating productive efficiency through the use of more efficient combinations of inputs and outputs and by raising efficiency through greater managerial effort and worker motivation. Improvements in product quality and in the quality and reach of services provided by privatized firms were also expected. The drive for efficiency, of course, raised fears among both managers and workers that efficiencies would be achieved largely through dismissals.

Another common objective of privatization and capitalization was to develop the domestic capital market. The shares of the privatized firms, conceivably managed by investment funds of various types, were seen as the natural foundation of stock exchanges and of a more efficient system of financial intermediation that would stimulate both saving and investment. It was also expected that share holders would begin to exercise effective governance over firms and their managers. In this regard, both in Bolivia and in East Europe, there was considerable doubt that individual shareholders would be able to exercise effective governance over firms or to provide a stable source of supply and demand for stocks on emerging bourses. As a result, investment funds or managers have been employed as temporary or long-term custodians of shares of newly privatized firms.

Finally, both in Bolivia and in East Europe, it was understood that foreign investment was vital for further economic development and modernization. Governments recognized that foreign investors would be reluctant to take on minority holdings, especially in firms that were owned by the government or by coalitions of workers and managers. Thus, whether the initial privatization involved sales to foreigners or not, privatization was seen as a prerequisite for increased capital flows.

There were also region-specific economic objectives. SOEs in East Europe were large, and there were few small and medium-sized firms (SMEs) because of past efforts to reap economies of scale and to facilitate the bureaucratic administration of SOEs by the state. Because SMEs are perceived as being more dynamic than large firms, privatization was used to facilitate the breakup of large SOEs into smaller privately-owned firms. Privatization in the SME sector could also occur through the creation of new firms by local or foreign entrepreneurs. Governments promoted these developments by selling shops, restaurants, etc. to private individuals as well as by supporting small business startups. While there were some breakups of firms being capitalized in Bolivia, the creation of SMEs through capitalization was not a goal. Rather, SOEs that would qualify as SMEs were privatized separately. Of course, in Bolivia, the need to privatize many small business establishments did not exist.

Miscellaneous Objectives

In Bolivia and in East Europe, the process of capitalization or privatization was costly, requiring a state bureaucracy to administer the process, often with the assistance of foreign consultants, accountants, and lawyers. In those East European countries where privatization created new outside owners, the process of privatization was financed by means of revenues received from the sale of vouchers or shares or from the revenues generated by the sale of property. In countries where privatization put SOEs into the hands of insiders on concessionary terms, it remains to be seen whether revenues will cover the administrative costs of privatization.

In the case of Bolivia, short-term considerations of covering the cost of the capitalization process appear not to have been as important. Rather, the key objectives were recapitalization of the firms privatized, the funding of the Bonosol, and the creation of a private pension system. Given the magnitude of the privatization effort in East Europe, the capitalization of even a majority of all SOEs was not a feasible objective. Moreover, given the almost total coverage of the population of East European countries by those countries' pension schemes and the high level of pensions relative to wages, capitalization would not have been able to generate a very high level of benefits for the population. Indeed, the Czechoslovak voucher privatization yielded each citizen some US $1,000-US $6,000 in portfolio value; other East European privatizations yielded considerably less on a per capita basis. At the beginning of the privatization process in East Europe, there were expectations that some of the proceeds of privatizations or shares distributed as part of the privatization process could be used to fund the activities of hospitals, universities, and other public institutions. These hopes were not realized, largely due to the limited revenues from privatization and the large budget deficits faced by East European governments.

One unique objective that East European countries did pursue through privatization was restitution, the return of property to owners from the pre-communist period. Although the extent of restitution and the means for carrying it out differed from country to country, restitution was an integral part of the privatization process in all but a few countries.

METHODS OF PRIVATIZATION

Given the broad range of assets to be privatized in East Europe and the different ways in which social property was created, including nationalization, seizure, and investment by the state, a variety of techniques has been necessary to privatize this property. While early debates focused on the best means of privatizing state property, experience shows that, in the transition economies, virtually all techniques save voucher privatization have been used, often simultaneously, in the process of transition.

Privatization through Restitution

Restitution of property expropriated by the state has been used for long-lived capital and for land in those countries where former owners exist and are able to demonstrate their past ownership. Consequently, restitution has played a much greater role in privatization in East Europe than in the former USSR, and it is mainly real estate and agricultural land that have been privatized through restitution. Restitution of agricultural land in East Europe involves the return of property to former owners or to their heirs, many of whom have since left agriculture for industry. The new owners should have the right to determine how to use their land and to sell or lease it, although, in practice, restitution laws have tended to limit these rights. These restrictions exist because of the perception that the exercise of private property rights over land previously utilized by a collective farm can severely disrupt agricultural production. If all members of the collective chose to become private farmers, the small size of holdings, the lack of capital, and the unfamiliarity of the new owners with farm management may adversely affect output. Moreover, members receive their land, but not their share of the collective's capital stock. If only some members leave the cooperative to farm their land as private owners, other impediments to production arise since the private plots may be in the midst of the cooperative's fields. To deal with this problem, most of the East European countries have passed legislation promoting the reconstruction of "real" as opposed to "socialist" cooperatives. Consequently, it is difficult to judge the extent and depth of privatization that has been brought about in agriculture through restitution if membership in existing, albeit reconstituted, cooperatives remains the only viable option for the majority of farmers.

Restitution has also been applied to apartments and houses, shops, restaurants and other small properties. In these cases, the specific properties are returned to owners, although it is often difficult for the new owners to dislodge current occupants. In the case of larger properties, such as factories, mines, etc., the tendency is to provide compensation to former owners in the form of cash or compensation vouchers that can be used to purchase state-owned assets being privatized. This is because often state investment is commingled with the privatized property. The value of capital privatized through the restitution of non-agricultural property is difficult to judge, but, in the Czech Republic, restitution of larger properties was expected to account for 5-10 percent of all state property, while in Slovenia, which has a very ambitious restitution law, the estimate is 10 percent of social property.[3]

How much privatization can be achieved by restitution depends on the amount of restitutable property, and this is determined in part by history and in part by political decisions about which acts of expropriation to redress and which former owners to compensate. In some countries, it has been the main measure for privatizing agricultural land, and it has also played a significant role in privatizing housing and fostering the emergence of a small business sector. In other countries, especially in the former USSR, restitution of farmland or real estate to original owners is unimportant. Although distribution of land and of real estate to current cooperative farm members and to occupants of state-owned apartments may be more feasible, this cannot be viewed as restitution.

Privatization through Sale of State Property

The bulk of industrial assets and good part of the housing stock in economies in transition were created as state property during the communist era. Thus there were no former owners to whom this property could be returned, and alternative means of finding owners had to be found. Often this involved sales to workers or managers at favorable rates. In the early stages of transition, the sale of state property, including SOEs, was seen as the best way of privatizing. By selling firms, it was expected that the state would earn revenues with which to reduce domestic and foreign debts, offset the administrative costs of privatization, augment current revenues and even endow pension and social welfare funds. Proponents of the sale of state property also thought that such a strategy would aid in the restructuring of firms. Quick sales were proposed so as to put firms in the hands of so-called core or strategic investors, whose large holdings in an individual firm would enable them to initiate strategies and investments necessary to make the firms profitable; sales to foreign owners were thought to offer the best prospects for such restructuring.

The most successful part of the programs to sell state property to new owners was the sale of shops, restaurants, and other small service establishments. For example, in the Czech Republic between 1990 and 1992, 26,000 such establishments, or leases for their use, were auctioned off, raising 33 billion koruny, about 3.4 percent of GDP and 4.7 percent of government expenditures in 1991.[4] In Poland, between 30-80,000 units were sold in 1992,[5] and in Hungary, where the private ownership of such establishments had been allowed previously, 8,700 had been sold by mid-1993.[6] In those countries where such small privatization programs have been pursued with vigor, they have created numerous small private businesses, albeit concentrated in retail and catering. Although there were concerns about the use of so-called dirty money and of local buyers acting as agents for foreign investors, in general these small privatizations have been among the most popular and least difficult aspects of privatization.

The sale of large SOEs to private investors, whether domestic or foreign, has proven to be a time-consuming and often difficult process. The Federal Republic of Germany, where the sale of the SOEs of the former GDR by the Treuhandanstalt (Treuhand) was used to privatize the bulk of the SOE sector, while not typical, is instructive. Between 1990 and the end of 1994, when its privatization activities ceased, the Treuhand disposed of 13,000 SOEs, despite considerable delays caused by the need to resolve claims of former owners and to negotiate individual sales contracts for each SOE sold. The Treuhand had two objectives. One was to privatize the firms in its charge as quickly as possible, and the second was to ensure that the firms it privatized would be able to compete and survive after privatization. The Treuhand had neither the time nor the expertise needed to restructure SOEs. Instead, the Treuhand passed this responsibility to the buyers, requiring them to put forward a business plan that called for keeping each SOE in its current line of business and that established employment and investment targets for the future.

The Treuhand was successful in this strategy for two reasons. The first is that it could, in effect, buy owners and their guarantees for its SOEs. Prices charged for firms being sold were low, and not infrequently it was the Treuhand who paid the new owner to take over the SOE. Thus, in the course of its existence, the Treuhand took in US $50 billion but spent US $243 billion on privatization. The second reason for the feasibility of sales as a privatization method is that domestic, i.e., West German, buyers had extensive assets of their own as well as access to the large and efficient German capital market, advantages not available to potential domestic buyers in other transition economies.

Although the Treuhand succeeded in privatizing the industry of the former GDR, the cost of doing so was large and politically controversial. Moreover, while the use of investment and employment guarantees in the sales contracts ensured that the new owners would not strip and liquidate their new holdings, the requirement that firms purchased from the Treuhand remain the same line of activity slowed structural changes in the former GDR. Compliance with buyers' guarantees must be monitored, and this requires a new bureaucracy. While in the aggregate the employment and investment targets have been met, it is reported that about 20 percent of all buyers have been unable or unwilling to meet their contractual obligations.

The sale of SOEs has also been the preferred path to privatization in Hungary. There, SOEs were required to convert themselves into corporations whose stock was held by the State Property Agency (SPA). The SPA selected and prepared groups of five to thirty-five firms for privatization through initial public offerings, auctions, direct negotiations with buyers, and management buyouts. To accelerate privatization, SOEs were also permitted to self-privatize by engaging consultants who would prepare the firm for privatization and seek out a buyer. Firms sliding into bankruptcy or liquidation could also employ consultants to sell off their assets to private owners. Sales of SOEs have relied heavily on foreign investors, who accounted for about two-thirds of the US $7.8 billion in privatization revenues through 1996.[7] The pace of privatization achieved through sales has been criticized as being slow, although by 1995 from 50 to 85 percent of privatizable industrial assets had been sold.[8]

The Hungarian experience highlights a number of the drawbacks of sales as a means of privatization. First, the process is slow, leaving the management of corporatized SOEs in limbo. Managers remained in operating control of their firms, enabling them to undertake "spontaneous" or "wild" privatization measures such as arranging low price sales to foreigners. The reliance on foreign investors exacerbated the politicization of the privatization process, with considerable wrangling about the appropriate prices to seek for the country's leading industrial firms. As a result of this politicization, the heads of the SPA have resigned or been replaced with considerable frequency. Most of the positive aspects of privatization through sales have also materialized, in that the flow of foreign direct investment into Hungary has been large given the size of the economy and the sale of firms has contributed to government revenues, with annual privatization revenues accounting from 4.2 to 28.9 percent of the state's annual budget receipts over the 1991 to 1996 period. In many cases, foreign investors have provided new investment funds, technology, and access to global markets.

The Hungarian case is probably indicative of the limits of what can be achieved through the sale of SOEs. In most transition economies, high inflation has eroded savings, and investors do not view corporate shares as a useful investment vehicle. As a result, sales of shares to employees or managers often must be promoted by means of preferential prices or by arbitrary undervaluation of the firm. For example, in Croatia, workers may purchase up to 50 percent of the shares of their enterprise at preferential prices, with payments spread over a five-year period. Such discounts help workers maintain insider power because it often proves difficult to find outside investors to purchase the remaining shares, which then revert back to the state, which acts as a passive owner. Foreign investors are understandably reluctant to invest in worker or manager-owned enterprises or in those where property rights are unclear.

In Bolivia, the sale of SOEs to private owners was the only means employed to privatize firms, although two separate programs were utilized. The smaller of these programs was the outright sale of SOEs. This program involved less than 40 firms and generated revenues of only slightly more than US $76 million. With the exception of ELFEC, an electricity distributor, the properties involved in this process were mainly small and medium-sized establishments.

The second program, the centerpiece of Bolivian privatization, was the capitalization of six large firms. These were ENDE, the electricity generating and transmission company; ENTEL, the telephone company; LAB, the national airline; ENFE, the national railroad system; EMV, the mining sector; and YPFB, the hydrocarbon production and transmission company. In the process of capitalization, ENDE, ENFE, and YPFB were also reorganized into several units.

There are two striking differences between the East European and Bolivian scenarios. The first is the relatively small number of firms slated for privatization in Bolivia. In East Europe, as demonstrated in table 4 above, over 1,000 firms had to be privatized in most countries. Even if one were to exclude small firms from this number, this striking difference would not be affected. Second, with the partial exception of the mining sector, the Bolivian SOEs capitalized are either not engaged in manufacturing or operate in sectors that are regulated or constitute natural monopolies. In East Europe, the practice has been not to privatize railroads, and sectors such as electric power, gas pipelines and airlines, have had a spotty record of privatization. Instead, in East Europe, the emphasis has been on firms in manufacturing. This may, to some extent, explain the reluctance to utilize capitalization to privatize in East Europe because, given the need for industrial restructuring, it was not clear that all firms being privatized should be required to undertake major new investment programs; downsizing was the anticipated course of action in many cases. Nevertheless, in the case of telecommunications sector, some transition economies did turn to capitalization as the preferred means of privatizing state-owned telephone companies, utilizing means that were strikingly similar to the Bolivian process, as will be shown below.

As in East Europe, the first step in capitalization in Bolivia was to turn the firms into corporations with the state holding all shares. Additional shares were issued by the newly-corporatized firm, and these shares would be sold, in both the Bolivian and East European cases, to the foreign investor. The revenues from the sale of the newly-issued shares go to the firm rather than to the state. In the case of Bolivia, uniform policy on share distribution was established for all firms being capitalized. New shares were issued in numbers sufficient to give the private investor 50 percent of all shares. Workers were permitted to buy shares at preferential prices in quantities that reflected their accumulated social benefits, but worker holdings constitute less than 1 percent of total shares in the firms being capitalized. Thus the private investor is the largest shareholder. In East Europe, there tended not to be a common capitalization policy for all firms deemed suitable for such a procedure, and thus share allocations were determined on a case-by-case basis.

A comparison of the capitalization of the Czech national telephone company, SPT Telecom, and of the Bolivian telephone company, ENTEL, shows how similar the process can be when objectives and constraints are similar. In both cases, governments utilized capitalization as the means of privatizing telephone services because they had similar objectives that they sought to advance through capitalization. These objectives included a desire to expand the availability of telephone services, especially in rural areas; to modernize, and especially to digitalize the telephone network; to prepare the sector for deregulation and competition; and to attract foreign technical and management expertise. Given the manifest need for large investments in the sector, capitalization was preferable to privatization.

In the telecommunications sector, both the foreign investor and the government need to negotiate numerous aspects of their future relationship because of the regulated nature of the sector and because of the government's desire to expand services and to bring about competition. To expand service, the government grants the operator a monopoly over some or all telephone services. However, the operator is constrained, in part, by regulation because the government sets tariffs and, in part, by contractual or regulatory requirements for the expansion of telephone service. In Bolivia, for example, digitalization of the network and provision of service to habitations of more than 350 were key performance requirements. In the Czech Republic, the operator faced targets for increases in the number of telephone connections and for the maximum wait for a new line.

Potential investors in the telephone system realize that their ability to meet such performance objectives while earning a profit will depend on the tariffs that the government allows them to charge during the time the telephone system is monopolized and on their ability to compete with new entrants when competition in telecommunications is introduced. These two considerations led the governments to pass laws that established tariff-setting principles. In Bolivia, tariffs could increase at the same pace as inflation; in the Czech Republic at two percentage points higher than the rate of inflation. However, within the aggregate price of telephone services thus set by the law, the operator is given leeway to rebalance the tariffs for individual services, increasing some tariffs while reducing others. This rebalancing becomes critical for the successful introduction of competition, envisioned in each country to begin five to seven years after capitalization.

In both countries, prequalification criteria for bidders were established, and a process for receiving and evaluating bids was put in place. The Bolivian process was identical for all firms; the Czech capitalization of SPT Telecom proceeded under rules that differed slightly from those of other Czech capitalizations. In both countries, the operator not only acquired ownership in the company, with a prohibition against the acquisition or sale of its shares for a given period, but was also bound by a management contract. In the Czech case, where the foreign investor obtained only 30 percent of the shares, temporary provisions for exceptional rights of representation in the Supervisory Board of the firm were also provided.

There were also important differences between the process in the two countries. The first had to do with the disposal of the government's shares. In Bolivia, these will ultimately all pass into the hands of the pension companies, which will sell them in due course to finance the Bonosol payments. In the case of the Czech Republic, about one-third of the shares were distributed to the public in the course of the second wave of voucher privatization. The other third remained in the hands of the government, although these will eventually be sold to investors through the stock market. The second major difference was in the mechanism devised for regulation. In Bolivia, a system of superintendencies was established. A superintendency was established for the telecommunications sector with the task of administering the laws governing the sector. The process of appointing the superintendent general and the sectoral superintendencies, as set out in the SIRESE Law, strives to provide considerable independence for the superintendency vis-à-vis the government, while also limiting the superintendent's discretion over the firms being regulated to the principles set down in the laws regulating the sector. In the Czech Republic, regulating was left to specific ministries who would fulfill their responsibilities according to the relevant laws. In general, the understanding of the need for regulation that is independent of the day-to-day pressures faced by a government seems to have been better appreciated and more explicitly developed in Bolivia than in the Czech Republic.

Mass or Voucher Privatization

Given the limitations on what can be privatized by means of restitution and by selling SOEs to new owners, most of the former East and Central European countries, many of the successor states of the USSR, and Mongolia have implemented or are planning to implement programs of mass privatization. In these programs, eligible citizens can utilize vouchers, distributed free or at nominal cost, to bid for shares of SOEs and other assets that are being privatized.

Mass privatization was first implemented in Czechoslovakia. SOEs were required to transform themselves into corporations, and those selected for privatization were required to prepare privatization plans. Outsiders were also permitted to submit privatization plans for SOEs, so that, on average, nearly four competing plans were proposed for each firm being privatized. On the basis of these plans, some firms were privatized by non-voucher methods, including tenders and direct sales to new owners, including foreign investors. Ultimately 1,491 SOEs, 988 of them from the Czech Republic, were included in the first wave of voucher privatization, which ran from October 1991 to December 1992, and a second wave, from August 1992 to November 1994, privatized a further 861 firms in the now-independent Czech Republic.

To participate in the bidding for enterprises, eligible citizens had to purchase a coupon booklet for 35 kc and to register it for 1,000 kc (28 kc/US $). Bidding for shares took place in rounds, five for the first wave and six for the second. Before bidding began, participants could allocate some or all of their points to Investment Privatization Funds (IPFs), who would then bid for shares on behalf of their investors.

The number of shares issued by each firm being privatized was set to achieve roughly similar levels of book value per share of all companies being privatized. Accordingly, in the first round, all shares prices were the same. If demand, in terms of points bid, was less than the available shares of the firm, then each bidder received the number of shares bid for, and the remainder were carried forward to the next round where they would be offered at a lower price. If demand exceeded supply, and the two could not be equated by reducing each IPF's bid by up to 25 percent, then no shares would be distributed, and the price would be raised for the following round. A computerized system matched bids and supply, deducted voucher points from successful bidders and prevented bidders from bidding more points than they had available. By the last round, over 90 percent of the shares offered and voucher points available had been used up in both waves.

The success of the Czech voucher privatization program is two fold. First, in combination with other privatization measures, between 65 and 90 percent of all assets in the Czech Republic are privately owned.[9] Since, as the discussion of privatization of SOEs by sale indicated, it is the large SOE sector that is difficult to privatize, the key role of the voucher privatization in privatizing these firms clearly distinguishes the pattern of ownership of the Czech Republic from its neighbors. Second, the voucher scheme proved to be popular. In the Czech Republic, 77 percent of eligible citizens participated in the first wave, and an even higher number in the second wave.

If there is a negative side to the voucher privatization, it is that, rather than creating a broad base of shareholders in the firms privatized, investors gave 72 percent of their points to IPFs in the first wave and 64 in the second. Moreover, these holdings of points were concentrated among funds and, more important, among investment groups, that is, IPFs with a common owner, so that the largest fourteen investment groups controlled 55.5 percent of all vouchers available in the first round. Because most of the IPFs were founded by banks, what has emerged in the Czech Republic is an ownership structure seemingly more similar to the German and Japanese bank-centered model than to the Anglo-Saxon pattern of broad individual shareholding. To some, the dominant role of banks poses serious problems regarding the meaning of private ownership and the effectiveness of corporate governance; to those who were skeptical of broad-based share ownership due its alleged weaknesses in the realm of corporate governance, the Czech outcome is comforting.

In contrast to Czechoslovakia, whose voucher privatization scheme was expected to bring about an Anglo-Saxon pattern of widespread stock ownership, Poland's voucher privatization, approved in October 1994, combines broad public participation with a concentration of shares in the hands of large investors. SOEs privatized through the program were transformed into corporations and their shares distributed to new owners. Sixty percent of each firm's shares were given to National Investment Funds (NIFs), which are organized as closed-end mutual funds. For each SOE being privatized, there is a lead NIF, and this NIF received 33 percent of the SOE's shares and four of the nine seats on the firm's Supervisory Board. The block of shares held by the lead NIF can be sold or traded only in its entirety, thus ensuring the existence of a more-or-less controlling ownership interest in each firm. The other fourteen NIFs will share equally in 27 percent of the privatized firm's shares. The firm's employees will receive 15 percent of the shares for free, a measure acknowledged by many observers to represent compensation for the workers' loss of control over the firm. In the near term, the remaining 25 percent of shares will be held by the government, but ultimately these shares will be sold on the stock market.

Polish citizens purchase shares in the NIFs for a nominal price. These shares will eventually become tradable and, in the interim, will yield dividends. Managers of the NIFs should behave so as to maximize the market price of their fund's shares, in part through astute portfolio decisions but also by exercising active control over those firms in which they hold large interests. The advantage of the Polish program is that it produces a broad distribution of SOE assets, but at the same time concentrates ownership so that managers will be subject to effective monitoring by the lead fund. Because the lead fund does not control the supervisory board, some measure of protection is afforded to minority holders. Certainly a key achievement of the Polish scheme is that it replaces the strong insider influence of workers' councils with control by outsiders.

Whether these potentially positive features of the Polish program can be realized in the long run depends in part on whether share trading will be sufficient to yield appropriate signals about NIF performance. With the government's 25 percent share holdings likely to be sold only in the future, and the lead Fund's 33 percent holding salable only as a block, only the workers' shares and those of other NIFs will be tradable, resulting in a thin market. Also unclear is whether the NIFs will have the skills and resources to manage firms, and whether the governance of the NIFs themselves will be constituted in such a way as to promote the interests their shareholders. Because the Supervisory Boards of the NIFs will consist of political appointees, NIFs may seek to use their power over the firms they own to promote policies that further government objectives at the expense of share-price maximization.

The Czech and Polish voucher privatizations reduced state ownership of firms and vested ownership and control in outsiders. Because of the strength of insiders, both workers and managers, and the weakness of the Russian government, that country's voucher privatization reduced the ownership role of the state and distributed ownership broadly, but in a way that left insiders firmly in control of their firms. As elsewhere, a key part of the Russian privatization process was transforming firms to be privatized into corporations. As part of this transformation, firms had to prepare a privatization plan, which required choosing one of three variants for distributing the firm's shares, and preparing a valuation of the firm as of October 1, 1992. When an SOE was transformed into a corporation, its shares were usually held by a so-called Local Property Fund (LPF), because, given Russia's size, centralized holding of shares was considered too cumbersome. The workers could choose among two or three options for privatizing the firm, with option 3 available only for large firms.

<u>Option 1</u>. Twenty-five percent of the firm's shares would be distributed to employees for free in the form of preferred non-voting stock. Employees could purchase, for cash or vouchers, an additional 10 percent of the shares, with voting rights, for 70 percent of assessed share value, and, the firm's managers could purchase an additional 5 percent of the shares. Given the high rates of inflation in Russia, the possibility of extending payments over three years, and the fact that the assessed value of the firm was not adjusted for inflation, the cost of the shares, which could be purchased for cash or vouchers, was usually quite low relative to the economic value of the firm.

The remaining shares were held by the LPF, which was required to auction off at least 29 percent of the firm's shares and could sell the remainder. Prior to disposing of these shares, the LPF's could not vote more than 20 percent of the shares they held, thus strengthening insider control.

Option 2. Employees could purchase 51 percent of the stock at a price 1.7 times the assessed value and at least 50 percent of the payment had to be in the form of vouchers. The remaining shares went to the LPF for disposal.

Option 3. This option applied only to large SOEs. The manager would sign a contract with the LPF to keep the firm in operation and to maintain a given level of employment for a two-year period. If the contract is fulfilled, managers may purchase 20 percent of the stock at assessed value, paying for it over a three year period. In addition, all employees can purchase, at a 30 percent discount, 20 percent of the stock in the form of voting shares.

If workers did not vote for options 2 or 3 by a two-thirds majority, then option 1 was used. In about 70 percent of the cases, option 2 was chosen; option 3 was rarely used. In effect, the first stage of the privatization process established insider control over the firm at prices that, given the rate of inflation, were nominal at best. In the second phase of the voucher privatization, the LPFs organized auctions in which outsiders, either individuals, foreigners, and investment funds could bid their vouchers for the shares made available by the LPFs. Bidders would deposit their vouchers and agree to take whatever price emerged from the bidding process or they could set a reservation price above which they would not wish to purchase shares. Shares that remained from this process could be retained by the LPF or sold for cash. Thus, auctions of firms occurred at different times and in different localities over the privatization period, which ran from December 1992 to June 1994, although some effort was made to improve access to auctions so as to include bidders from other regions.

Unlike the Czechoslovak vouchers, which were denominated in points, Russian vouchers had a face value of 10,000 rubles and could be used not only to bid for shares of firms but also invested in investment funds or used to purchase housing and property in the small scale privatization. Each citizen was eligible to purchase a voucher for 25 rubles, and 95 percent of the population did so, although, because the vouchers were not registered to the buyer, many people sold their vouchers to other individuals or to investment funds. Over 600 investment funds were organized, but they garnered only 30 percent of the available vouchers in exchange for their own shares, and they also purchased vouchers for cash on the secondary market.

In quantitative terms, the Russian mass privatization achieved impressive results in that it privatized nearly 16,000 SOEs, employing about half the industrial labor force, in less than two years. While the process was in part chaotic and lacking in central control, the administration of voucher privatization did not compare unfavorably with the efficiency of other government activities. Nevertheless, the weakness of the government resulted in a massive distribution of assets and control over firms to insiders, raising serious questions about the future governance of privatized firms and, indeed, about the ability of the government to end both the subsidization of, and interference in, the affairs of privatized firms. The regional concentration of share ownership is also likely to put significant pressure on local authorities to support firms in their jurisdiction. Finally, the design of the voucher privatization, by providing such great benefits for insiders, had the consequence of making managers unwilling to fire workers because losing one's job also implied the loss of insiders' rights to the firm's shares. As a result, the official unemployment rate in Russia remained quite low, although many workers were on reduced hours or received no pay but continued to be listed as employed.

The foregoing examples amply illustrated both the strengths of the voucher method and its drawbacks. The strengths are speed, transparency and the ability to overcome barriers such as a lack of solvent buyers, the need to restructure SOEs and managerial and bureaucratic inertia. Moreover, voucher privatization can reduce political opposition to privatization when variants that allow insiders to retain control are used because selling SOEs to outsiders generally implies that control will pass to the buyer. If carried out correctly, voucher privatization can also serve as a mechanism to strengthen the credibility of the privatization program because shareholders will come to identify with their new property and resist its expropriation. On the other hand, if shareholding is concentrated among the workers on a firm-by-firm basis, then workers may be willing to accede to nationalization if it offers the prospects of secure employment. The dangers of the voucher method that were raised before mass privatization programs were implemented, such as the inflationary consequences of issuing vouchers, the lack of interest in share ownership, massive selling by low-income holders of shares, etc. have largely proven irrelevant. Moreover, fears that diffused ownership would prevent effective corporate governance have proven false. Indeed, the most interesting aspect of voucher privatization is that, by expected or unexpected means, relatively concentrated share ownership has emerged, albeit in some cases because insiders have retained control. Indeed, to some policy makers, it is the lack of control over the pattern of shareholding that emerges from voucher privatization that may be this method's main weaknesses.

While the Bolivian capitalization program did not provide for the distribution of shares to the population for vouchers, the Bonosol program has several elements in common with the outcomes of voucher privatization that deserve mention. First, the shares that the government held in the capitalized companies were, in effect, distributed to the population through the use of financial institutions, the pension funds, that play a role analogous to that of the IPFs in transition economies.

The Bolivian government's share holdings in the capitalized companies, after being held temporarily by a fiduciary, pass to two pension funds. These funds, which may be joined by other entrants in the future when the pension system is opened to competition, play a dual role. One is that they hold the shares transferred to them from the government, and, out of the dividends and proceeds from the sales of these shares, they pay the Bonosol, currently US $250 per year to each eligible Bolivian citizen. Eligible are those who are over 65 so long as they were at least 21 years of age in 1995. It is expected that the value of this fund will be exhausted around the time that all the eligible recipients have died. This will then leave the pension funds with the task of managing the portfolios of contributors to Bolivia's new, private pension system. Thus, the use of the pension funds to manage the Bonosol provides them with activities that will sustain their operations until their pension activities become sufficiently large to cover their overhead expenses and that enable the pension funds to gain valuable experience.

A second role that the pension funds play is to serve as "custodians," who hold, on behalf of Bolivian citizens, the shares given them by the government. In part, this role may be seen as a paternalistic one, based on the assumption that a direct distribution of shares to the population would lead many to squander the wealth they thus receive. Such concerns also played an important role in the design of investment funds in transition economies. The weaknesses of this solution is that prudent individuals might wish to receive their "social dividend" directly to use it to finance entrepreneurial activities while less-sophisticated citizens may heavily discount future income, thus not value the Bonosol, and come to view the scheme with cynicism. These negative effects have to be weighed against the negative image presented by individuals and institutions buying up citizens' shares at steep discounts as occurred in Russia.

As part of their custodial role, the pension funds are expected to utilize the voting power that their custody of the shares gives them. This may also prove to be an important role if individual shareholders are not seen as useful agents for effective corporate governance.

CORPORATE GOVERNANCE AND PRIVATIZATION

Whether the capacity of new owners to exercise effective control over their firms exists and is being applied to firms in transition economies is a vexing but important issue. It is vexing because the effective exercise of corporate governance is difficult to observe or measure. Looking at the relative performance of privatized and unprivatized firms is subject to serious biases. In Hungary, the better SOEs were privatized first; in Poland, many SOEs were privatized through liquidation, that is, they were sold off because they were not viable under state ownership. Moreover, given the evidence on restructuring by SOEs above, and the short period in which private owners, among them foreigners with valuable resources to contribute to their new properties, have been on the job, systematic differences between privatized and unprivatized SOEs are difficult to uncover. Newly-started private firms do differ from SOEs in terms of job creation, profitability, growth and the absence of over staffing, but this may have more to do with the fact that most of them were formed after the large output declines of the early transition period, and thus their capacity and employment decisions were adapted to current conditions from the start.

The issue is important because many of the economic objectives sought from privatization will materialize only if effective mechanisms of corporate governance emerge and are employed effectively. If privatization can not provide for effective corporate governance by owners, then statistical measures of the extent of privatization will have to be rethought because what will be created is not capitalist systems in the sense that we think of them, but rather some form of small-sized state socialism or a unique East European corporatism. Whether effective corporate governance is being created for former SOEs through privatization depends on two questions. The first is whether, in terms of the distribution of ownership and the laws that govern the exercise of ownership rights, it is possible for outside owners to effectively monitor and discipline managers. The second is whether the new owners have the ability and motivation to do so.

On the first issue, the answer depends very much on the country and the means of privatization adopted. For example, a reading of the relevant case studies of Hungarian enterprises shows quite clearly that foreign investors involved in the privatization of Hungarian SOEs are exercising their rights to determine corporate policies.[10] There are also some individual domestic owners or small groups of owners who have either founded or gained control of large firms who are exercising the kind of control that large shareholders do in developed market economies.[11]

In the case of Russia, prospects of outsider control of privatized enterprises are dim. Managers use both legal and illegal methods of maintaining their control over the firms they head. Some observers argue that, over time, the diffusion of shares to outsiders and emerging activism by investment funds, banks and holders of large blocs of shares will lead to the emergence of activist outside owners who will wrest control from entrenched managers.[12] While such an evolutionary scenario is not inconceivable, it must be admitted that, in Russia, privatization of SOEs was based on the political decision to cede control to insiders, and whether either the state or other owners such as investment funds can wrest control from Russian managers and workers must be seen as doubtful. Much the same can be said for other countries whose privatization has tended to split ownership between insiders and a passive national property fund. Firms are in some sense private, but they are controlled by owners whose stake in the firm is likely to be inconsistent with long-term wealth maximization.

In the Czech Republic, ownership has devolved to IPFs through the decisions of voucher holders. Whether individuals sought to invest in IPFs with the expectations that the funds would be able to govern corporations more effectively than would dispersed share holders or whether they invested in funds for portfolio diversification is unclear. Nevertheless, Czech IPFs own about 70 percent of the shares of privatized SOEs. Even though funds are limited to owning no more than 20 percent of the shares of any firm, several funds owned by the same parent could easily acquire controlling interest. Moreover, because the funds were, with some notable exceptions, founded by banks, they have leverage over firms not only by virtue of ownership, but also by virtue of the banking relationship between their parent banks and the firms whose shares they hold. Of course, leverage works both ways, and IPFs' ownership decisions must take into account their implications for the bank's loan portfolio.

Knowledgeable observers are skeptical of the role that IPFs are able to play in the governance of privatized SOEs in the Czech Republic.[13] Coffee reports that IPFs have little difficulty in getting representation on boards of directors and that boards have significant powers.[14] Nevertheless, many IPFs have portfolios containing hundreds of firms, and finding individuals to represent the funds on boards is both difficult and expensive. Coffee further reports that directors representing IPFs have little knowledge of the firms on whose boards they sit or of business affairs and thus are unable to exert much discipline on managers.[15] A survey of the governance role of IPFs in a sample of Czech firms concludes that IPFs were generally passive in corporate governance, which the authors identify with the firing of managers and instigating changes in the way the firm was run.[16] However, it is unclear that firing managers is evidence of restructuring, and some of the measures of changes in operations used in the survey seem to be questionable indicators of the exercise of corporate governance. Indeed, one problem in assessing effectiveness of corporate governance is the use of proxy measures such as the firing of managers for what is the true objective of effective corporate governance, improved performance. Brada, Hess, and Singh utilize comparisons of business strategies of foreign and domestically-owned firms in transition economies to conclude that the latter appear to be effectively governed.[17] The second problem is that there is no standard for distinguishing between active and passive behavior on the part of IPFs. That is, outside observers often appear to assume that a massive turnover of managers and radical changes in firm organization are required in transition economies, and that the failure to observe such changes is evidence of owner passivity. However, comparisons with managerial turnover and corporate reorganizations brought about by owners in market economies may make Czech IPFs appear relatively active.

If Czech IPFs are not active in restructuring the firms whose shares they own, part of the explanation may lie in the governance of the IPFs themselves. The majority were founded by large commercial banks, and the banks may be imposing objectives other than IPF share price maximization on the managers of their IPFs. For example, the banks may view IPF ownership of a firm's shares and participation on its board as a way of increasing the bank's financial transactions with the firm, as a means of influencing the firm's behavior so as to protect the banks' loans to the firm, as a means of obtaining additional information about the firm, etc. This issue of IPF governance will also arise in the Polish case, where the boards of the funds will consist of public appointees.

There were expectations in both the Czech and the Polish voucher privatizations that the stock market would also act as a mechanism for evaluating the performance of firms and thus disciplining managers. Chances for this are limited by the thinness of stock markets brought about by the large insider and institutional holdings. In Russia, managers have acted to prevent sales to outsiders. In the Czech Republic, IPFs tend to trade stocks among themselves, leaving the stock markets to small investors. In Poland, too, large blocs of shares are tied up either in the hands of the lead NPF or with the government. Thus, stock markets appear in practical terms not to offer a strong source of influence on managers.[18]

A popular perception is that in many transition economies, it is the banks that are emerging, or perhaps should emerge, as the major players in corporate governance, somewhat like the German or Japanese model where a bank is connected to firms by ties based both on loans and ownership of the firms' shares by the bank. The advantages of this system are seen as the superior information available to banks by virtue of their dual role as creditors and owners, by their skills in processing financial information, and by their willingness to accept firms' pursuit of long term strategies at the expense of short-term profits.[19]

The genesis of the banking sector in most transition economies suggests that there are some conceptual obstacles to effective governance by banks. Most of the large commercial banks were organized out of the communist-era state banks and assigned clients, with their assets and liabilities, in arbitrary fashion. Some observers have argued that such a banking system was not only incapable of exercising effective governance over clients, but that it also tended to perpetuate the defects in corporate governance that existed prior to the start of transition.[20] The arbitrary assignment of clients and lack of effective bankruptcy legislation made such banks captive to their creditors, forcing them to continue to lend to poorly-performing firms.

A further problem lies in the governance of the banks themselves. In some countries the major commercial banks remain state owned; in others they are private, although the government retains a major ownership role. This suggests that bank managers face either passive owners or a large shareholder, the government, whose objectives are likely to be other than profit maximization.

The evidence on bank behavior is mixed. Dittus argues that banks in the region have, in aggregate terms, redirected credit from badly- to well-performing firms.[21] Capek shows that, in the case of Czech banks, newly formed and foreign-owned banks' portfolios differ from those of the large commercial banks founded at the start of the transition in a way that suggests that the newcomers are much less the captives of past credit relationships.[22] Nevertheless, the evidence of bank activism in restructuring poorly-performing firms[23] does not suggest that banks are a major instrument of corporate restructuring. The reasons for this are not much different from those already raised in the case of investment funds. Monitoring and activism are costly, the ownership structure of banks may not be conducive to activism in restructuring, and in some countries, government policies may even discourage restructuring activities by banks.

Finally, there is the government, which remains as a large shareholder not only in the many unprivatized SOEs that continue to exist in transition economies, but also in the privatized ones. In general, government ownership is passive, at times quite explicitly so. In large part this is a policy choice, but it is unlikely that governments can play an active role in corporate governance for many of the same reasons mentioned in the case of banks and investment funds. They lack the human resources needed for effective representation on corporate boards. While banks and funds can at least compensate their employees by letting them receive director's fees, civil servants are often prohibited from doing so. Thus, it is difficult to expect over-worked civil servants to be active directors with no reduction of their normal duties and no compensation to boot, even if they were to have the requisite business knowledge.

In sum, there appear to be severe problems to the creation of effective corporate governance of SOEs being privatized in transition economies. Nevertheless, it may well be that this is not as serious a problem as it seems. In market economies, insiders also seem to be relatively entrenched and shareholder activism is seen as a newsworthy event when top level executives are dismissed. Thus, it may well be that, given the relatively turbulent environment in transition economies, the cost-benefit calculus for domestic, although evidently not for foreign, owners is to abstain from efforts to engage in active control of firms except in unusual circumstances.

In Bolivia, the governance issue is less complex because the foreign investors acquire the largest bloc of shares and thus appoint a majority of the directors. This would appear to lead to relatively effective governance by the foreign investor. Nevertheless, the role of the pension funds requires some clarification because, as the “other owner” they appoint the remainder of the firm’s directors. At this point, there seems to be no agreement within Bolivia as to what the objectives of these “minority” directors should be. Some believe that the privatization funds, through their directors, should play an active role in corporate governance. Others express the view that the pension funds should concentrate their efforts on managing their portfolios and not on trying to develop and implement operating strategies for the firms whose shares they own. Also unresolved is the relationship between the de jure governance of firms that are, effectively, affiliates of foreign multinational firms, and the de facto means of imposing decisions on such affiliates within the organization of multinational firms.

The ability of the Bolivian capitalization program to stimulate capital formation by aiding the development of capital markets, including a stock market, appear to be as limited as the ability of transition economies to achieve similar objectives. Given the fact that two large financial institutions will hold the bulk of available shares, it is unlikely that an active retail market for company shares will emerge. Rather, large blocs of shares will be sold to or purchased from other domestic or foreign financial institutions. In this sense, the Bolivian model would appear to have some disadvantages vis-à-vis privatization models that provide a greater role for individual shareholding.

CONCLUSIONS

Privatization in East Europe and capitalization in Bolivia have a number of similar objectives: reduction of the state, improvement in the functioning of formerly state-owned firms, and greater capital formation. The differences in approach between the East European and Bolivian programs seem to stem largely from the magnitude of the task and from specific structural characteristics of the economies. Perhaps the greatest difference between the two approaches is that in East Europe, privatization was less linked to other programs whereas, in Bolivia, capitalization was an integral part of a broader program of regulatory reform and construction of a private pension system. For East Europe, the outcome of privatization thus depends on the parallel emergence of other institutions and mechanisms that are needed for private firms to function effectively. In Bolivia, the key questions are whether the system of regulation and the pension funds can remain sufficiently depoliticized to enable the newly privatized firms to function effectively in the long run.

END NOTES

[1]Peter L. Berger, "The Uncertain Triumph of Democratic Capitalism," *Journal of Democracy*, June, 1992, *3*, 7-16.

[2]Ellen Comisso, "Property Rights, Liberalism, and the Transition from `Actually Existing' Socialism," *East European Politics and Societies*, 5, Winter, 1991, 162-188.

[3] Cheryl W. Gray and Associates, *Evoliving Legal Framework for Private Sector Development in Central and Eastern Europe*, World Bank Discussion Paper No. 209 (Washington: World Bank, 1993), pp. 49, 137.

[4]Organization of Economic Cooperation and Development, Trends and Policies in Privatisation (Paris: OECD, 1993).

[5]Roman Frydman, et al., *The Privatization Process in Central Europe* (London: Central European University Press, 1993).

[6]Peter Mihályi, "Privatization in Hungary: An Overview," in United Nations Conference on Trade and Development, *Privatization in the Transition Process: Recent Experiences in Eastern Europe* (United Nations, 1993), pp. 367.

[7]Peter Mihályi, "On the Quantitative Aspects of Hungarian Privatization," *Comparative Economic Studies,* 29, Summer 1997.

[8]Ibid.

[9]John C. Coffee, Jr., "Investment Privatization Funds: The Czech Experience," World Bank, Policy Research Department, December 1994.

[10]Estrin et al., 1995.

[11]Josef Brada, Alexandra Hess, and Inderjit Singh, "Corporate Governance in Eastern Europe: Findings from Case Studies," *Post-Soviet Geography and Economics*, 37, 1997, pp. 589-614.

[12]Andrei Schleifer and Dimitry Vasiliev, "Management Ownership and Russian Privatization," The World Bank, Policy Research Department, December 1994.

[13]Raj Desai, "Reformed Banks and Corporate Governance in the Czech Republic," *Post-Soviet Geography and Economics*, 37, 1996, pp. 463-494.

[14] Coffee, "Investment Privatization Funds."

[15]Ibid.

[16]Peter Kenway and Jiri Chlumsky, "Privatization and the Behaviour of Firms," University of Reading Working Paper No. 316, 1995.

[17] Josef Brada, Alexandra Hess, and Inderjit Singh, "Corporate Governance."

[18]Du_ran Triska, "Post-Privatization Securities Markets in the Czech Republic," in *Mass Privatization: An Initial Assessment* (Paris: OECD, 1995), pp. 87-106.

[19] Masahiko Aoki, "Controlling Insider Control: Issues of Corporate Governance in Transition Economies," in Masahiko Aoki and Hyung-Ki Kim, eds. *Corporate Governance in Transitional Economies* (Washington: World Bank, 1995), pp. 3-30; and John M. Litwack, "Corporate Governance, Banks, and Fiscal Reform in Russia,"in Masahiko Aoki and Hyung-Ki Kim, eds., *Corporate Governance in Transitional Economies* (Washington: World Bank, 1995), pp. 99-120.

[20]Edmund S. Phelps, et al., "Needed Mechanisms of Corporate Governance and Finance in Eastern Europe," European Bank for Reconstruction and Development Working Paper No. 1, March 1993, pp. 23-28.

[21]Peter Dittus, "Bank Reform and Behavior in Central Europe," *Journal of Comparative Economics*, 19, December 1994, pp. 335-361.

[22]Ales Capek, "The Bad Loans and the Commercial Banks' Policies in the Czech Republic," Czech National Bank Working Paper No. 39, 1995.
[23] Mieczyslaw Groszek, "The Role of Banks in the Restructuring of Firms," Polish Development Bank, Warsaw, May 1995; and John M. Litwack, "Corporate Governance."

THE CAPITALIZATION PROGRAM IN BOLIVIA AND ITS IMPLICATIONS FOR REFORM OF STATE-OWNED ENTERPRISES IN CHINA[1]

by Lan Xue

With the passing of Capitalization Law on March 21, 1994, Bolivia formally began to implement the capitalization program, part of a broad social and economic reform which also includes popular participation, pension reform, and education reform. After little more than three years, the capitalization program is near its completion with five major public companies capitalized and over US $1,670 million investment in these companies committed.

While it is still too early to evaluate the performance outcome of the capitalization program in Bolivia, the unique process of capitalization itself offers a rich ground for careful investigation. One way to study this process is to compare Bolivian approach with those taken by other Latin American countries or Eastern European countries. While such an exercise is interesting from an academic point of view, its practical impact would be limited since most privatization programs in other Latin American countries and Eastern European countries have either been completed or are near their completion. Another approach is to examine the capitalization program through the lens of another group of countries, which have a significant public sector in their economy and either have started a reform program or, are on the verge to do so. It is for this group of countries that the study of Bolivia's capitalization process is especially meaningful. Lessons learned from such a study will have direct impact on the design and implementation of these countries’ reform programs. This paper takes the second approach and selects China as the reference point.

The rest of this paper is organized as follows: first, it will review the global trend of privatization and present some economic rationales for this practice. Then, the paper will discuss the capitalization program in Bolivia, followed by a discussion on China's SOE problems and China's effort in addressing them. Next, the paper will analyze the capitalization process in Bolivia, focusing on the strategic design and implementation process, and the applicability of such experience for China's SOE reform. The paper will conclude by offering some final comments on the capitalization process in Bolivia and SOE reform in China.

Background on Privatization

Privatization refers to the transfer of ownership or control from public to private sector. This definition is somewhat generous since it does not require the transfer of the majority of an ownership as long as the control power is transferred. In this sense, the capitalization program in Bolivia can still be seen as one form of privatization, albeit a very special case. The intended objectives of such transfer are to improve efficiency and performance, generate revenue, disperse ownership, reduce budget deficit, attract foreign capital, and develop capital markets. Techniques of privatization include trading sales to a strategic investor, public offerings, closed subscriptions, joint ventures, liquidations, concessions, auctions, vouchers or certificate based transfers, employee or management buyouts, or various combinations of the above.

In the past two decades, privatization has become a major trend in world economic restructuring both in developed and developing countries. As a recent report by International Financial Corporation (IFC) observes, while Chile was one of the earliest countries to begin privatizing, the process of privatization quickly took roots in industrialized world, and spread over to developing countries around the world in the 1980s. More profoundly, during the 1990s, countries in Eastern Europe and the former Soviet Union joined this wave of privatization, handing over thousands of medium and large enterprises to private hands.[2]

According to the IFC report, around 2,700 SOEs were privatized in over 95 countries between 1988 and 1993. Among these transactions, 2,655 were non-voucher-based sales which yielded US $271 billion in revenue. Industrialized countries accounted for US $175 billion of this revenue and 15 percent of the number of transactions while developing countries accounted for 85 percent of sales and 35 percent of all revenue generated. In the developing world, 57 percent of privatization took place in Latin America and Caribbean region, followed by Europe and Central Asia with 18.7 percent. On a sectoral basis, infrastructure (such as telecommunication, energy, water, and transportation) transactions have been dominant, accounting for 33 percent of total realized revenue for the developing countries as a whole. However, in Eastern Europe and Central Asia, privatizing industrial enterprise played a more important role, accounting for half of all sales.[3]

The economic rationale for privatization rests on the effects of private ownership on allocative efficiency in the marketplace and on the internal efficiency of firms. Economic analysis on this issue can be framed as a general agency problem, in which a principal (or group of principals) seeks to establish incentives for an agent (or groups of agents) who takes decisions that affect the principal, to act in ways that contribute maximally to the principal's own objectives. The difficulties in establishing such an incentive structure arise from two factors: (a) the objectives of principals and agents will typically diverge, and (b) the information available to principals and agents will generally be different.[4] Within this general framework, managers of SOEs can be viewed as agents acting for their principals, namely the government bureaucracies to which they are responsible. Of course, government bureaucrats are themselves agents for the ultimate principals; the people that they are supposed to serve.

The change of ownership from public to private hands immediately brings the shift in the objectives of principals and possibly changes the types of incentive structures that can be offered to the managers. Therefore, both of these changes will have significant efficiency impacts. However, ownership is not the only factor that determines allocative and internal efficiency. A range of other factors also play important roles, including the effectiveness of the respective monitoring systems, the degree of competition in the market, the regulatory policy, and the technology innovations in the industry. Thus, empirical evaluation of the welfare implications of privatization has to take into account not only the ownership variable, but market structure, regulation, and other relevant variables.

Up to late 1980s, empirical studies had failed to establish the clear-cut superiority of private over public ownership in respect to both allocative and internal efficiency (See, for example, the review by Vickers and Yarrow[5]). Nevertheless, in recent years, a somewhat more positive picture of privatization has emerged. For example, a 1992 World Bank sponsored research project found that privatization significantly improved domestic welfare in ten of the twelve cases analyzed while productivity went up in nine of the twelve cases and stayed the same in the other three.[6] Another study of forty-one firms, fully or partially privatized by public share offerings between 1981 and 1989 in fifteen countries, shows substantial efficiency gains.[7] A recent assessment of the portfolio of the privatization investments by IFC also showed that the verdict for around 70 percent of the transactions are positive.[8] Of course, one must be very careful in interpreting such results because of the special circumstances related to the selection of the cases. Further, most privatization success stories come from high- or middle-income countries. In low-income settings, privatization is more difficult to launch, and the chances of a negative outcome are greater.[9]

The Capitalization Program in Bolivia: An Overview

The capitalization program in Bolivia is an innovative approach to transferring SOEs to the private sector. The objectives of the program are: (1) to redefine the role of the government by transferring the selected SOEs to the private sector; (2) to attract foreign private investment and maximize the value of the Bolivian share in the enterprises after restructuring; and (3) to enhance competition, promote efficiency, and protect the consumer and the environment through the establishment of proper sectoral regulatory framework. The essence of the program is the injection of private capital in exchange for a 50 percent share and full management control of the SOE to be capitalized. The other 50 percent share is distributed, either directly or indirectly, among all adult Bolivian citizens.

The six SOEs up for capitalization are EMV (the state smelting company), YPFB (the oil and gas company), ENFE (the national railway company), ENTEL (the state telecommunication company), ENDE (the state owned electricity company), and LAB (the state run Airline). The total value of these SOEs exceeded 65 percent of Bolivia's GDP, making this the largest privatization program in the world by this measure. Also, Bolivia is the first country in Latin America to distribute equity among its citizens free of charge.

The seven steps in capitalization process are as follows:

1. The book value of the company to be capitalized is determined in accordance with nationally and internationally accepted accounting and auditing standards.

2. The company is converted into one or more Mixed Capital Corporations (SAM) with the participation of the state and the workers who accept the government's invitation to subscribe shares at book value.

3. The SAM increase its capital by a new share issue which is offered to potential strategic partners by international public bidding.

4. After a rigorous pre-selection system, the bidder with the best economic offer is awarded the new share issue, equivalent to 50 percent of the capitalized company's capital.

5. The successful bidder, after paying the cash amount of its economic bid, receives the share certificates and signs the share subscription contract and the administration contract.

6. The shares owned by the State are transferred under trusteeship to the Fiduciary, Cititrust Limited, which becomes the custodian of these shares until the Pension Fund Administrators begin operating. These will be in charge of managing shares and distributing benefits derived from the capitalized companies among Bolivians.

7. The transfer of shares to the fiduciary transforms the capitalized partnership into a corporation, managed by the strategic partner.[10]

At the same time when state control was transferred to private hands, a regulatory framework was established to safeguard the rights and obligations of the participants in the economic system: the state, the private operator and the consumer. Two regulation systems were created. The first one was a Sectoral Regulation System (SIRESE) which was intended to oversee economic activities in public services and natural monopolies, including telecommunications, electricity, hydrocarbons, transport, and water services. SIRESE is composed of a General Superintendent and Sectoral Superintendents, operationally autonomous but integrated, which are in charge of ensuring the effective and efficient operations of their specific regulation area. The second regulation system is the Financial Regulation System (SIREFI), which regulates pensions, security exchanges, banking and insurance entities.

While this capitalization program fits the general rubric of privatization as defined previously, it is an inherently different process compared with common privatization programs. First, unlike other privatization programs which focuses on the sell of state assets, capitalization essentially creates a joint venture between an SOE, which will contribute its assets, and a strategic partner who will match the commercial value of the assets with capital. Second, the partner's contribution stays in the joint venture so as to ensure a healthy growth of the venture, rather than delivering it to the national treasury. Third, the state's holdings are redistributed orderly to the Bolivian people through pension funds.

The capitalization program in Bolivia is a good example of a pragmatic and creative approach to privatization which exploits country-specific opportunities and simultaneously provides incentives for the private sector and other stakeholders. The strategic design of the program is embedded with all the necessary ingredients of a successful privatization program. It involves not only the transfer of control to the private sector and bringing benefits to the public, but also the establishment of necessary regulatory framework to create a fair and competitive environment for private investors. While it is still too early to evaluate the performance outcome of the capitalization program in Bolivia, the innovative design of the program and its successful implementation has already provoked a rethinking of many important issues, some of which will be explored in detail in the following discussion.

China's SOE Reform

Similar to Bolivia and other countries with significant state sector, China is also engaged in the process of transforming its SOEs. The state sector was dominant in the Chinese economy before the current economic reform, which started in 1979. While from 1980 to 1995, SOEs contribution to the industrial output has declined from 77.6 percent to 42.8 percent. Yet, SOEs still account for about 65 percent of total government tax revenues and employ roughly two-thirds of the urban work forces, which amount to over 100 million people. In industrial sector alone, about 80 million people are on the payroll of the more than 105,000 SOEs in this sector. Further, almost two-thirds of China's investment in fixed capital is by SOEs. The sheer scale of China's SOEs makes reforming them one of the biggest institutional transformation ever attempted anywhere.[11]

Over the last decade and a half, reforming SOEs has been one of the top priorities in China's overall economic reform. In the early 1980s, efforts were mainly focused on the decentralization of government controls and the increase of managerial autonomy in SOEs. This was later reinforced by formally introducing a Contract Responsibility System which involved contracts between the government and managers, specifying a minimum amount of profit submission and a profit division rule for any extra profits above the minimum. The 1992 promulgation of the 14 Autonomous Managerial Rights followed the same strategy. Recently, efforts in SOE reform have centered on the creation of a Chinese modern enterprise system. In November 1993, the 14th Party Congress published the Decision on Issues Concerning the Establishment of a Socialist Market Economic Structure, which established a 50-point SOE reform agenda. In early 1994, the State Council announced the 10,000-1,000-100-10 SOE reform experiment introducing new accounting methods (10,000 SOEs), asset valuation (1000 SOEs), corporatization (100 SOEs), and comprehensive reform (10, now 18 cities). In 1994 China's first modern company law became effective. At the recent People's Congress, SOE reform again drew major attention. A whole section of Premier Li Peng's government report was on the reform of SOEs, in which more measures were proposed as ways to push forward with the reform effort.

Despite these efforts, the majority of SOEs are still not performing well. The percentage of SOEs running at a loss increased from 22.7 percent in 1992 to 32.7 percent in 1994.[12] According to a survey of 36,000 SOEs, during the first half of 1996, the realized profit declined 70.3 percent while the losses increased 55.6 percent when compared with the same period in 1995. The net loss was over 25 billion yuan. At the same time, the phenomenon of state-asset stripping has become increasingly alarming. It is estimated that, on average, the annual loss of state assets (not including intangible assets) has been 50 billion yuan since 1982.

Problems underlying the deteriorating performance of China's SOEs are many and complex. The following discussion will touch some of the major ones, which include ineffective internal management of SOEs, the influence of centralized planning systems, excessive debts, and heavy social burdens.

The internal management problem of SOEs should not surprise anyone who is familiar with the principal-agent theory. While the State Council is supposed to be the agent for the principal, namely the general population of the country, by exercising proprietary right over all state-owned assets in SOEs, it has to go through several layers of bureaucracy to ensure that its agents (managers of SOEs) pursue the objectives of the principal. The difficulty lies in how to set up an incentive mechanism and monitoring system to make sure that the interests of the managers (agent) are in line with those of the public (principal). Lack of an effective incentive mechanism and monitoring system is a fundamental cause of the poor performance of SOEs in China. While privatization has been chosen by many countries, including Bolivia, to solve this problem, China has been reluctant to follow this route.

To add to the complexity, the influence of the old centralized planning system is still deep-rooted. In such a system, a SOE was only a production unit under the control of the government. It was basically a political entity, not an economic one. The managers were appointed by the higher administrative authorities. Production plans were established also by higher administrative authorities, often at the national level. Despite reform efforts for almost two decades, the party system and various government ministries still exercise various power over individual SOEs, such as appointment of managers, approval of investment projects, and so on.

Partly related to the above issues is the large debt accumulated by SOEs. The asset-liability ratio of China's SOEs has been on the rise. In 1980, this ratio for industrial SOEs was 18.7 percent, of which the debt ratio of current assets was 48.7 percent. In 1993, however, the asset-liability ratio for industrial SOEs was 67.5 percent, of which the debt ratio of current assets was 95.6 percent! Basically, these enterprises relied on bank loans for their working capital. According to the findings from an assets value verification conducted by the National Administrative Bureau for State-Owned Property (NABSOP) on 20,000 SOEs in 1994, the asset-liability ratio was 75 percent.[13]

Excessive debt problems of China’s SOEs are of two kinds, fiscal liabilities and excessive liabilities. Fiscal liabilities include: (1) policy-related losses such as those due to price controls; (2) various social welfare burdens, such as excessive expenses on education, health care, and public security for the community; (3) losses due to improper management and liabilities caused by incorrect decisions or macro-policy changes. Excessive liabilities are mainly the results of high reliance by Chinese enterprises on debt financing. The excessive debt problem not only starves many promising enterprises, but also increases the operational risks of banks. According to one report, bad loans accounted for over 22 percent of all loans by Chinese banks, most of which were given to SOEs. By the end of 1995, overdue interest payment reached the level of 220 billion yuan.[14]

Another unique problem Chinese SOEs has to face is the many social functions they have to perform, resulting in heavy financial and administrative burdens. The major social roles SOEs have to play involve surplus labor, pensions, medical care, housing, and various welfare and service facilities.[15]

Surplus labor refers to those people who are not needed in an enterprise, but are still employed. While estimations vary, most people tend to agree that about 20 percent of the employees in China’s SOEs are surplus labor, which total up to 15 million. Wages and job-related benefits for these people represent a major hidden cost.

The pension problem is related to the changing structure of the Chinese population. In 1978, aging retirees as the percentage of total number of employees in the country was less than four percent. By 1993, this percentage became 16 percent. For some old SOEs, retirees have risen to half of the total employees. The financial contribution to the pension fund for these retirees adds another significant burden.

Another social burden is the cost related to medical care. First of all, the labor Protection Medical Care System introduced in 1951 stipulated that all medical expenses by a sick employee, and the salary subsidy during the leave period due to illness, shall be shouldered by the enterprise, and that the enterprise shall reimburse 50 percent of the medical expenses if any family member of an employee suffers from a disease. In recent years, it has been clear that this system has led to serious waste of medical resources. In many enterprises, this expense alone exceeds 10 percent of the salaries of their employees. While measures to reform this system have been adopted by some enterprises, the overall situation has not improved. Another cost item related to medical care is the hospitals and clinics SOEs operate for their employees. There are 110,000 medical institutions run by SOEs, employing 1.4 million staff and accounting for one-third of the country's total number of medical personnel.[16] Most of these institutions are heavily subsidized by the SOEs with which they are affiliated.

Housing is another major headache for China’s SOEs. SOEs are responsible for providing housing for their employees—from construction, housing distribution, to maintenance and repairs. In addition, SOEs have to run their own schools. At present, SOEs in China operate a total of 18,000 primary and middle schools, employing 600,000 teachers and administrative personnel. The annual operating cost for this system exceeds 3 billion yuan. SOEs are also in charge of setting up many other welfare and service facilities, such as canteens, hostels, kindergartens, transportation fleets, and so on.

All these difficulties have made China's SOE reform a formidable task. The overall strategy of the Chinese government in reforming SOEs since 1995 has been to focus the reform effort on the large SOEs, attempting to establish a modern corporate governance system in these SOEs, while at the same time giving much greater freedom to small SOEs so that they can try their own methods. If Bolivia's experience has any relevance to China's SOE reform, it would most likely relate to the small SOEs. Of course, the successful experience accumulated by small SOEs can also pave the way for large SOEs to follow suit.

Differences Between Bolivia’s Capitalization Program and China’s SOE Reform

A simple comparison between the Chinese and Bolivian economies and their approaches to reforming their state sectors would appear to reveal startling contrasts, and force one to question if there is anything China can really learn from the capitalization program in Bolivia.

First, there is a significant difference between the sizes of the two countries. China has a population of over one billion, while Bolivia has only 6.7 million people, less than one percent of China’s population. The size of the two state sectors are also quite different. Using 1994 as the year of comparison, Bolivian state sector generated over 70 percent of Bolivian GDP, which is about US $4.32 billion, while Chinese state sector generated over 40 percent of Chinese GDP, which is about US $234 billion. The size of Bolivian state sector is only about 1.8 percent of the Chinese state sector.

Second, the objectives of the two governments in reforming their state sectors are very different. The Bolivian government is committed to the withdrawal of the state from productive activities and the transfer of most of its SOEs to private ownership and management. On the other hand, the objective of China's economic reform is to create a "socialist market economy" in which SOEs will continue to play important roles. The improved performance of SOEs, rather than a change in their ownership or management control, is the most important objective of China's SOE reform.

Third, reform efforts in the two countries have focused on different sectors of their economies. The SOEs being capitalized in Bolivia are mainly in public service or mineral extraction sectors. They are natural monopolies that have to be operated or regulated by the government. On the other hand, China's SOE reform has mainly focused on manufacturing industries.

Fourth, the reform approach and speed at which the reform proceeds are also quite different for the two countries. The capitalization program in Bolivia aims at a complete transformation of major SOEs into private enterprises in a relatively short period (less than four years). China's SOE reform is a partial and gradual approach that has been going on for over a decade, with no end in sight.

Fifth, the two government are facing different political challenges in their reform efforts, as the result of the differences between the political systems in the two countries. As a democratically elected government, Bolivian government has to maneuver within a democratic framework, being sensitive to the voice of the opposition parties and the voters. The election cycle in Bolivia also imposes a deadline for the completion of the capitalization program. On the other hand, the Chinese government has a different set of issues to worry about. True, it does not have to be concerned with the typical political pressures one may find in a democratic system. However, it is extremely concerned about the political stability of a country with a population of over one billion people. China's own experience during the "Cultural Revolution" from 1966 to 1976 and the political turmoil Russia has been going through since the end of the Cold War have demonstrated the consequences of political instability to the Chinese leadership. Such concerns impose limits not only on the speed with which China's reform can proceed, but also on the type of reform measures that the system is willing to tolerate.

Despite these differences, one should not forget an important similarity between the two countries, that is, both are developing countries faced with the paramount task of dual transitions: from a largely agricultural and primary resource-based economy to an industrial economy, and from an economy with a large state sector to the one in which market forces and private enterprise play important roles. These two social transformations are intertwined, generating unique reform dynamics which must be recognized and reconciled.

These contrasts and similarities do not necessarily by themselves diminish or strengthen the usefulness of Bolivian's capitalization program for Chinese SOE reform. Recent history of economic reform has shown that countries with similar initial conditions may not take the same reform approach, while similar reform programs may be followed by countries with very different starting points. For example, prior to the current economic reform program, China's economic system was modeled after Russia's central-planning system. In addition, China's development strategy after 1949 also followed in Russia's footsteps. However, post Cold-War Russia followed an economic "shock therapy" approach by dismantling its central-planning system and privatizing its SOEs within a relatively short period of time. China, on the other hand, has taken a gradual approach that in many ways resembles the reform measures taken by Eastern European countries during 1970s. These experiences and others show that what really matters are the level of innovation in the ideas for reform and what the reform requires of a country given the conditions it faces.

In short, the differences between Bolivia and China do remind us that when examining what China can learn from Bolivia's capitalization program, we must be careful to analyze the degree to which the design and implementation of the capitalization program were influenced by economic and political environments unique to Bolivia. We also must carefully consider the degree to which lessons learned from the program can be transferred to other circumstances, with appropriate modifications.

What China Can Learn from Bolivia's Experience

Despite the differences between China and Bolivia outlined in the previous section, a careful examination of how the capitalization process is structured and implemented in Bolivia surprisingly offers rich ground for exploration and for drawing lessons not only for China, but also for other countries that are transforming their state sectors. While the capitalization program can be scrutinized from many different perspectives, the following discussion will focus on the strategic design and implementation process. In each area, I will start with a description and comments on the operation of the capitalization process. I will then focus on the applicability of the Bolivian experience to China's SOE reform.

Separating the Transfer of Control and Distributing the Benefits

A key feature of the capitalization program is the coupling of the transfer of ownership and management of SOEs to private hands with the distribution of benefits to the public. One can characterize this process as a *two-stage* model of privatization, as compared with other typical privatization programs. The first stage involves the replacement of the role of government by the private sector, namely, giving control of the SOEs to the private sector. The second stage involves the distribution of the state assets (or benefits generated by such assets) to the public in an organized way so that such benefits can fulfill pressing social needs. In the capitalization program, the social need is the establishment of a new social security system, which provides for retirement pensions, disability and survivors insurance, and workers' compensation benefits for professional risks. Providing such direct and tangible benefits to the public also helps to generate public support for the program, which is very important to its success.

Other, typical privatization methods can be viewed as one-stage models for transferring state assets directly to the public. In voucher sales and similar mass privatization programs, most individuals with SOE vouchers will probably sell their vouchers quickly. Those who want to keep them still have the task of finding agents to manage their assets in hand. Individuals have much less negotiating power in such transactions, particularly when financial markets are underdeveloped. Some other privatization programs may appear to be following a two-stage process, since state assets are sold to the private sector while the proceeds goes to the state treasury. However, in such cases the second stage hardly exists because rarely is there careful consideration of how best to use the proceeds from such privatization programs. Delivering the financial proceeds to the treasury only reinforces the existing spending program. There is no direct and tangible benefit to the public.

The two-stage process of capitalization offers an interesting model that could be modified for SOE reform in China. However, at the current time, it is unlikely that the government will transfer either ownership or management control of large SOEs to private hands. Thus, the learning process probably has to start with small and medium-sized SOEs.

In adopting the two sage model in China, one can follow more or less the same procedure found in the first step of the capitalization program, namely, the transfer of control of SOEs to the private sector in a well organized fashion. The potential strategic partners can be either domestic or foreign. For the second stage, the distribution of the state shares (or benefits from them) to the public has to be modified to fit the particular political and economic environments in China. A complete transfer of ownership of the state shares to individuals will probably meet strong political resistance. Instead, the focus could be on how to distribute the benefits of such shares to the public, while at the same time leaving the state as the owner of these shares. Given that the unemployment rate is sure to increase as the result of SOE reform, one way to use the state shares is to create several social security funds to be managed by the private sector. Instead of distributing the shares to the public, these shares could be floated on a secondary financial market. Dividends and proceeds from these shares can be used to strengthen the social safety net, so as to reduce the potential negative and destabilizing effects rising unemployment could produce. The government would still be the nominal owner of the shares, but the management of such assets would be transferred to private hands. Existing Managing Institutions of State-Owned Assets (MISOA) could become regulators of these social security funds and negotiate with private fund managers on commission rates, market splits, and other issues.

This is only one of many possible ways to adopt the capitalization model to transform SOEs in China. Such an experiment can begin in a particular industrial sector or province on a trial basis. It is also possible to try different methods for different situations. For example, one province can start a social security fund, while another might prefer to create a debt relief fund. One must be careful, however, to go slowly. There are so many SOEs in China waiting to be transformed that if all of them were privatized at once, not only would it be difficult to follow a rigorous bidding procedure, but there also would be a shortage of funds. It has to be done step-by-step.

Creating a Strong Focal Point for Policy Design and Management of Implementation

After reviewing experiences of privatization from different countries, a World Bank report found that a strong focal point with a clear mandate, sufficient autonomy, minimal bureaucracy, ready access to top decision makers, and quality staff are key conditions for successful implementation of privatization programs.[17] In the capitalization program in Bolivia, the Ministry of Capitalization (MOP) serves as such a focal point.

The Capitalization Law of March 21, 1994 established a clear mandate for the government to capitalize the six largest state-owned enterprises. The Ministry of Capitalization was created to carry out this mandate without the interference of other government ministries. It has authority as well as access to the president on important issues. The ministry is in charge of designing basic strategies for capitalizing each company, hiring competent staff, drafting procedures for capitalization, selecting consultant services, and dealing with other matters. During our interviews in Bolivia, many MOP officials commented that being close to the president was very important when dealing with controversial issues. Crucial decisions could be made quickly, avoiding the usual lengthy bureaucratic process.

In contrast, many government ministries are involved in the reform of China's SOEs. While the State Commission for Structural Reform is in charge of drafting policies for economic reforms, including SOE reform, it lacks the clout and authority over industrial ministries and the State Economic and Trade Commission. In addition, there is a wide disagreement on what the Chinese government should do to push forward SOE reform. But it is clear that the government will still maintain its control of large SOEs. The reform effort will focus on the creation of modern corporate governance systems. On the other hand, the government has not committed itself to any specific approach to reforming small and medium sized SOEs. As suggested above, China could modify the capitalization program to transform small and medium sized SOEs. However, to carry out this effort systematically, the Chinese government must consolidate the administrative powers of the different ministries and create a strong focal point for such a program. One possibility is to empower existing Managing Institutions of State-Owned Assets (MISOA) at the provincial level, entrusting them with responsibility for designing and implementing the proposed reform program. MISOA in the central government could function as a coordinating and service institution to facilitate the entire process.

Ensuring Transparency in the Reform Process

It has become an almost universally accepted principle that in reforming SOEs, every transaction involving state assets must be transparent. In the past decade, China has tried joint ventures, auctions, and other measures involving the complete or partial transfer of state assets to the private hands. However, none of these measures has gained popularity. One important reason is that most of such transactions lack the necessary transparency and many become asset-stripping schemes in SOEs. The public attitude toward these transactions is therefore skeptical, at best.

The capitalization process in Bolivia has made great effort to ensure the transparency of the process through clear and publicly announced criteria for contracting consulting services, clearly defined competitive bidding procedures, proper disclosure of purchase price and buyer, and adequate monitoring and supervision of the program. For example, the capitalization process requires the use of a broad range of consultant services to design capitalization strategies, define the concession contracts, set tariffs, and prepare economic and financial studies on each of the companies to be capitalized. In order to maintain the high quality of such services and ensure fairness in the process, the selection of consulting services has followed the guidelines set by the World Bank, which is the main institution funding these services.

Also, the process of selecting a strategic partner(s) for the SOE to be capitalized has been equally rigorous, since this is where the public focuses its attention. The capitalization program has adopted a set of legally binding and universally accepted procedures that involve a series of steps ranging from contacting potential strategic partners, provision of information, the selection of an investment bank, and final selection of a strategic partner. The World Bank has taken on the role of monitoring and enforcing the rules and procedures. In each critical stage of a selection process, the approval of the World Bank is required before the process can move forward.

If China decides to adopt the two-stage model proposed above, maintaining the transparency of the process is an essential pre-requisite for the success of the program. However, if such a program starts with small and medium sized firms, it is unlikely that it can support the elaborate procedures established for the capitalization process. The procedures must be simplified and standardized to fit the specific economic and political environments of China. In addition, a powerful and reputable institution has to be found or created to play the role the World Bank has played, to monitor and enforce the procedures set for the program. This will be an extremely challenging task given the widespread corruption in China.

Establishing a Regulatory Framework for the Reform Process

As discussed in section one, ownership is not the only factor that determines allocative and internal efficiency. Other complementary institutional factors, such as the degree of competition in the market or regulatory policy, also play key roles. In a developing country undergoing economic transformation, it is often the case that the necessary regulatory framework is lacking or incomplete. One of the greatest challenges in privatizing SOEs in such a situation is building this framework simultaneously with the effort to privatize. Such a regulatory framework is particularly necessary in Bolivia because most of the SOEs being capitalized are in sectors with strong natural-monopoly characteristics.

The law for the sectoral regulation system (SIRESE) of October 28, 1994 created an autonomous, technical regulatory authority that acts as an independent arbiter safeguarding the rights of and state obligations to the consumer and industry. It represents a key conceptual breakthrough: managing the market through regulation, not ownership. SIRESE is composed of a superintendent general and a superintendent for each of the sectors to be regulated: telecommunications, electricity, hydrocarbons, transport, and water services. The main role of SIRESE is to regulate and control enterprises’ compliance with the law and the legal process, to ensure that public services properly meet their legal obligations, and to protect the rights of consumers and private enterprises. A financial regulatory system, or SIREFI, also was created to regulate pensions, securities exchange, and banking and insurance entities.

SIRESE redefines the role of government and industry. In the past, the government set policy and standards while simultaneously implementing and supervising those policies and standards. Now, the government can focus exclusively on making policies and setting standards, leaving implementation to the industry and supervision to SIRESE. In addition to SIRESE, complementary laws were created to define the competitive and fiscal environments specific to each industry. For example, the electricity law divides the electricity industry into the generation, transmission, and distribution sectors. It prohibits the ownership of more than one activity in the industry so that competition, price stability, and optimal operation can be achieved. In addition, a national committee for load dispatch (CNDC) was created to administer and operate pricing. It is composed of five people. The CNDC president serves as a representative of the superintendent for electricity, while the other four members represent both industry and consumers.

In the capitalization program, the building of a regulatory framework goes hand-in-hand with the effort to seek strategic partners. In particular, potential investors relied this framework to protect their long-term business interests and reduce the risk of entering into the Bolivian market. This is probably why both the Electricity Law (passed on December 21, 1994) and the Telecommunication Law (passed on July 6, 1995) were passed before the closing of the bidding process for the two SOEs in these sectors. For example, under the new regulatory environment, the capitalized ENTEL keeps its current concessions, including long distance, cellular, cable, and other services until the year of 2000. Also, in the case of electricity, the new partner companies have exclusive right to install power generation until December 1999 in the inter-connected power system. The market will be open only after 1999.

The new regulatory environment also strives to achieve a balance between the interests of industrial suppliers and those of consumers. For example, the old electricity tariff structure was based on a cost-plus formula that guaranteed a fixed return on investment, but also allowed power operators to transfer all of their costs to the customer. Under the new system, profitability is linked to equity values, and returns on common equity for distribution companies will be established with reference to the average returns of the industry standard. Efficiency savings will be divided between consumers and the electricity companies.

As discussed in previous sections, a Chinese reform program that is similar to Bolivia's capitalization program would most likely to focus on small and medium-sized firms. As a prelude to future reform for large industrial giants, however, China should try to establish a regulatory framework for large firms in industries with strong natural monopoly features, such as railway systems, airlines, telecommunication, electricity, and others. The monopoly of SOEs in these industries has resulted in low efficiency and stagnancy. For example, there is a general agreement that the monopoly on telecommunication held by the Ministry of Post and Telecommunication is partly responsible for the slow development of China's telecommunication industry. China is unlikely in the near future to allow private control of the types of companies capitalized in Bolivia. But the government can maintain its roles of setting policies and standards and implementing them, while also allowing a newly created, government-independent regulatory system to take charge of the supervision and enforcement of these policies and standards.

Providing Incentives for Reform Participants

The Bolivian capitalization program has been very practical and flexible in providing incentives for high-quality private investors and pension fund managers to join the program. First, the SOEs being capitalized represent good investment opportunities since they are all found in key sectors of the Bolivian economy, with almost guaranteed markets and potential for further growth. Second, the program is flexible enough to give full control of the capitalized firm to foreign strategic partners, even though they hold only a 50 percent share in the company.

The program also gives private pension fund mangers (AFPs) enough incentive to explore Bolivia as a promising market. As the contract states, an AFP, by signing up to manage the pension funds in Bolivia, enjoys a guaranteed market for the first three years, and limited competition from the participating AFPs for an additional two years. This first-mover advantage would allow them to maintain an advantageous position in the subsequent open market.

These incentives proved to be very effective. All the companies that submitted their bids in the capitalization program were internationally reputable firms. If one can use the quality of the strategic partners the capitalization program has attracted as a measure of its performance, the program has done an excellent job.

At the same time, the program also worked hard to create additional stakeholders in the process. One example is the way it provided incentives to employees of SOEs being capitalized to participate in the newly created mixed capital corporation (MCC). The stock option proposal only requires that employees sign a contract to purchase one share of the MCC at book value (Bs. 100). Once doing so, they have the option of buying as many shares at book value as they want (up to the value of their accrued pension benefits) after the strategic investor has established the market price of the share. For example, in the case of LAB, the market price of the share after capitalization is US $42.18, more than double the original purchasing price of US $20.58. So employees who signed up a contract to purchase at least one share of LAB in the form of an MCC prior to the capitalization of LAB now can purchase more shares (up to the value of their accrued pension benefits) at the price of US $20.58. Such a risk-free investment scheme encouraged popular participation by employees of the SOEs being capitalized. In total, more than 11,000 Bolivian workers, representing 76 percent of the workers in the capitalized companies, became shareholders of these companies, resulting in an increased commitment of these people to the success of the program.

While it would be difficult for China to adopt the specific measures described above for its SOE reform, the practical and flexible spirit of the program's design deserves special notice. Indeed, in the next phase, a more practical and flexible approach is required to expedite the China's reform process.

Conclusion

The above analysis has focused almost exclusively on the positive experience of the capitalization program in Bolivia, particularly in the strategic design and implementation of the program, and on how that experience might be applied to China's SOE reform. It does not in any way suggest, however, that the capitalization program in Bolivia was instituted without difficulties and obstacles. In fact, there are still some thorny issues facing the program that may erode the success achieved so far and endanger the full completion of the program.

One issue is the problem of organized labor. During interviews in Bolivia, this author was told that the capitalization of ENFE involved dealing with 1,300 excess employees, many of whom relied on social benefits. A group of them blocked the closure of a railway station workshop. The Minister of Capitalization was forced to compromise with them by offering additional benefits, such as building hospitals or schools. Similar resistance was also met in the case of EMV. A total of thirty-nine seminars were held for EMV miners by officials from the Ministry of Capitalization in an effort to educate them about the benefits of capitalization. But such efforts were often invalidated by leaders of organized labor who were opposed to the reform. Recent events indicate that the capitalization of EMV has been stalled by such resistance. Currently, it is uncertain how the next administration will handle this problem.

Another issue is how to build domestic capacity for auditing, consulting, financial services, and other skills that are required to ensure that the new pension system and regulatory framework works. During the capitalization process, such services were most provided by contractors from outside the country. It would be too costly to continue to rely on foreign sources for such services. The development of Bolivian capacity is essential. Fortunately, the capitalization program has already made a good start in providing the necessary training in these areas.

Generating wider public support for capitalization program and maintaining the momentum for the reform are continuing challenges. It has been suggested that there is a deep distrust of traditional Bolivian private entrepreneurs in the country's social and political culture. Some Bolivians consider privatization to be another form of corruption that favors the cronies of top officials.[18] Such sentiment might gain popularity if the capitalized firms do not deliver their promised performance over the next few years.

Despite these potential problems, the momentum built by the capitalization program has already taken roots in Bolivian society. One can be cautiously optimistic that the course of this quiet revolution is irreversible. The ultimate success of the capitalization program will have important demonstrative effects for similar efforts in other countries, including SOE reform in China.

China can incorporate specific aspects of the capitalization program into its own strategies, but it is unlikely that any reform program can offer quick solutions to the problems faced by China’s SOEs. As Thomas Rawski has commented, successful reform does not require the removal of all obstacles. The continuation of enterprise subsidies, redundant workers, soft credits, and other leftovers from the planning era only confirm: the reform is incomplete. A wise reform strategy should identify the most pressing shortcomings and concentrate resources on the relaxation of binding constraints. Limited administrative capacity ensures the presence of diminishing returns in institutional change. Attempting more may mean accomplishing less.[19] One can only hope that through the long process of learning from others, coupled with indigenous innovation, China will ultimately realize the vast potential SOE reform can produce.

END NOTES

[1]This paper benefited from comments made by Dr. David Cole and other participants of a workshop “Bolivia’s Capitalization: Analysis and Perspective,” convened at Woodrow Wilson International Center for Scholars in Washington D.C. in May 1997.

[2]International Financial Corporation, 1995.

[3] Ibid.

[4]John Vickers and George Yarrow, *Privatization: An Economic Analysis* (Cambridge: The MIT Press, 1991).

[5]Ibid.

[6]Ahmed Galal, Leroy P. Jones, Pankaj Tandon, and Ingo Vogelsang, "The Welfare Consequences of Selling Public Enterprises: Caes Studies from Chile, Malaysia, Mexico, and the UK," Country Economics Department, Public Sector Management and Private Sector Development Division, The World Bank, Washington, D.C., 1992.

[7]William L. Megginson, Robert C. Nash, and Mathias van Randenborgh, *Efficiency Gains from Privatization: An International Empirical Analysis*, University of Georgia, Department of Banking and Finance, Athens, 1992.

[8]International Finance Corporation, 1995.

[9]Sunita Kikeri, John Nellis, and Mary Shirley, *Privatization: The Lessons of Experience* (The World Bank: Washington, D.C., 1992).

[10] Ministry of Capitalization, Capitalization Monitor, Vol. 1, No. 1-Vol. 2, No. 16, La Paz, August 31, 1994 to December 31, 1995; and Ministry of Capitalization, "Briefing Notes: Bolivia Advances Towards the 21st Century," La Paz, 1997.

[11]Nicholas Hope, "Opening Remarks, Policy Options for Reform of Chinese State-Owned Enterprises," World Bank Discussion Paper No. 335, The World Bank, Washington, D.C., 1996.

[12]Haoruo Zhang, "Several Problems Concerning the Building of a Socialist Market Economy," *Strategy and Management*, No. 1, 1997.

[13] Wu, 1996.

[14]Decision Reference, Weekly Economic Commentary, "The Focal Point of China's Reform and Development: SOEs," No. 39, 1996.

[15]Hu, 1996.

[16]Ibid.

[17]Sunita Kikeri, John Nellis, and Mary Shirley, "Privatization."

[18]Juan Antonio Morales, "Bolivia and the Slowdown of the Reform Process," PSD Occasional Paper No. 7, Private Sector Development Department, The World Bank, September 1995.

[19]Thomas Rawski, "Implications of China's Reform Experience," in G.J. Wen and D. Xu, eds., *The Reformability of China's State Sector,* World Scientific Publishing Co., 1997.

BOLIVIA'S PENSION REFORM:
DECISIONS IN DESIGNING THE STRUCTURE OF THE SYSTEM

by Yves Guérard and Martha A. Kelly[1]

On November 29, 1996, President Gonzalo Sanchez de Lozada signed public law number 1732 the effective Pension Law, which began a process of transforming the pension system in Bolivia. The passage of the Pension Law and development of pension regulations accomplished three major initiatives:

• pass-through the proceeds of the capitalization process to Bolivian citizens;

• replace the existing pension pay-as-you-go schemes with a new system designed to provide substantially improved retirement, disability and survivor benefits to a greatly expanded faction of the Bolivian labor force; and

• reduce the financial burden put by the pension entitlements on the National Treasury.

The Capitalization Law, passed in March 1994 provided for the shares of the « capitalized » companies retained by the Government, the value of which was equal to the investment made by the strategic partners in these « capitalized » companies, be transferred directly to new financial institutions created to administer the pension system, without going through the hands of the government. The plan required therefore that new financial institutions, *Administradora de Fondos de Pensiones* (AFP), be established to administer a new pension system to be created to replace the doomed existing systems and manage the distribution of the Capitalization proceeds to the Bolivian citizens.

The creation of the new pension system expanded coverage to many more workers than the previous *sistema de reparto*, ensured common and professional disability (workers compensation) coverage and provided a mechanism to offer non-dependent workers (self-employed) an opportunity to save for their own retirement. Ultimately, the decision was made to have one system: close the *sistema de reparto* and its many complementary plans (military, police, university and college faculty and workers, municipal employees, etc.), transfer affiliates and beneficiaries into the new system, redirect contributions, provide for the continuation of vested benefits from the old system and develop an aggressive amnesty campaign to encourage employers and workers who had previously evaded participation to join the new pension system.

The new law, which replaced a multi-tiered, costly system of many retirement programs for different groups of workers with a simple, single system covering all workers, was designed to produce the following additional benefits:

• Mandate retirement, death and disability benefits for all dependent workers.

• Provide retirement death and disability benefits for the first time in Bolivian history to self-employed workers.

• Develop a universally applied system of disability and workers compensation benefits.

• Permit affiliates a choice in AFP administrators and in benefit payment options.

• Increase individual responsibility while providing the participants with better access to information about their rights.

• Eliminate intergenerational financing of benefits (i.e., younger workers paying for older retirees) and reduce evasion of the pension contributions.

• Increase availability of long-term investments.

• Support economic growth through the flow of pension assets into the domestic capital market.

• Offer business opportunities for insurance companies in the area of death, disability and life annuities benefits.

• Reduce future pension-related costs to the government.

• Allow greater modulation of fiscal policy.

• Transfer management of the pension system to international financial institutions with experience managing other pension systems.

• Put in place a prudential regulatory system providing a mechanism for supervision and oversight of the pension institutions as part of the financial sector through the creation of a Superintendent of Pensions under a General Superintendent of Superintendents (SIREFI).

• Enhance participant rights and benefits through solvency requirements for AFPs and related insurance companies.

• Control risks through diversified investments in both domestic and international markets.

Background

The reforms of the existing pension system were necessitated by several factors which together made the continuation of the old system unsustainable.

Demographic changes had begun to undermine the effectiveness of the existing Paygo system. A combination of declining birthrates (fewer women having fewer babies) and extended life expectancies (a result of better living conditions and medical breakthroughs) caused a widening of the population of benefit recipients and a narrowing of the funding population. The existing system was not designed to support these changing demographics and was further plagued with a high level of evasion, and burdened with high costs created by an inefficient administrative system with weak governmental oversight of employers and benefits administrators. It was not able to cope with a growing demand to pay benefits to a larger percentage of the population which had not made contributions during their working years. The system was nearly bankrupt, splintered and managed by many groups (often with competing interests) and workers grew to consider their contributions nothing more than a tax from which a benefit was not clear nor certain.

The calculation of salary and the formulas from which pension benefits were determined, the age at which benefits could be drawn, the indexation of benefits in payment and the amounts contributed by both employers and affiliates had grown to be more a function of politics than of actuarial analysis. Unequal controls and asymmetric access to information led to inequitable distribution of benefits of the system.

The *sistema de reparto* was made-up of FOPEBA, a basic defined benefit pension plan covering a number of groups of workers and of many smaller pension schemes designed to cover specific groups of workers: FONCOMs, that is complementary occupational defined benefit schemes and other special schemes covering the military, universities, police, judicial power, municipalities and others where inconsistencies between contributions and benefits was the rule rather than the exception.

Only about 11 percent of the work force received some form of coverage. The self-employed were not entitled to participate and therefore could not enjoy benefit coverage under the old system. Nevertheless, the growing unfunded liability of the *sistema de reparto* was projected to require massive inflow of cash from the Treasury with a present value estimated at over US US$3 billion if the system was not changed, due to the widening gap between contributions and benefit payments. Further it was recognized that the liabilities of the *sistema de reparto* would only increase with time. It was evident that without a dramatic change, pension liability would compound the national debt and delays in achieving pension reform would make the process infinitely less palatable because even though many of these plans were not « public » plans, the Treasury was deemed the ultimate source of funds in case of financial unbalances.

Following a global trend away from public pay-as-you-go (PAYGO) systems, which eventually result in an extreme burden on National Treasuries, to funded plans where assets are privately managed by investment professionals, the government began to study the pension systems of other Latin American countries to develop policy options and eventually solutions for building a sustainable, efficient pension system for Bolivia.

The Capitalization Process

The impetus for the beginning of pension reform in Bolivia was the Capitalization Law, part of a larger reform effort put forward in the 1993 electoral platform of President Sanchez de Lozada, called *Plan de Todos,* which led to an examination of the pension systems of other Latin American countries. The capitalization reforms were intended to increase productivity and competitiveness by achieving structural changes in the economy through increased private investments in strategic sectors where progress was limited by lack of public financial resources, reduce the state's direct participation in sectors that can be managed privately, improve public sector finances and attract both foreign investments and expertise.

The program invited strategic partners, experienced in their fields of private industry, to make capital investment to finance further improvement and developments. These partners would then receive 50 percent ownership in the company and a contract giving them full management control. The cash investment was used by the company to fund operations and expansion. The remaining 50 percent ownership was distributed in shares and held in trust for the benefit of eligible Bolivian citizens. Other similar efforts under the *Plan de Todos* resulted in the capitalization of 110 additional small industries valued at US $77.8 million. Employees were also given the opportunity to participate in the ownership.

The Capitalization Law stipulated that the proceeds of the capitalization of state-owned industries, the retained shares, would then be turned over to newly created independent financial institutions, AFPs responsible for the more traditional pension administrative functions. Thus the role of the new AFPs was defined to include the process from which distribution of the capitalization proceeds would occur. It created the initial need to develop the search and evaluation process that took place between June 1996 and January 1997.

The second requirement was that these AFPs would also affiliate workers into the new pension system for purposes of making ongoing contributions. These AFPs would establish an individual account for each worker, properly account for contributions and their earnings, issue annual statements, subcontract death and disability coverage to insurance companies, calculate and pay benefits to retirees and their survivors and manage the assets of both the proceeds of the capitalization process (transferred to the AFPs in shares of the capitalized companies) and the assets contributed by the affiliates.

Two groups under the direction of the Minister of Capitalization, Alfonso Revollo, were responsible for the development of the pension reforms and creation of the AFPs: National Secretary for Capitalization Edgar Saravia and National Secretary of Pension Dr. Alfonso Peña, assisted by Sub-Secretary Evelyn Grandy de Anzoleaga.

Unlike traditional privatization programs in which the state-owned industries and assets are sold to the private sector resulting in revenue for the government, the capitalization process of Bolivia did not direct the proceeds of the sale to government coffers. One criticism of traditional privatization programs that President Sanchez de Lozada wanted to avoid was the propensity for foreign buyers to pay for key assets but wind down the company after the sale, leaving workers unemployed. Another common complaint is that the money is not seen as providing a direct benefit to the citizens. Typically proceeds of a privatization process are used to lower the national debt or finance infrastructure projects the benefits of which, if any, are too indirect for most citizens to appreciate as a benefit derived from the previous sale of an industry.

Given the skepticism many privatizations in other countries have provoked, the President wanted to establish a unique process, one in which the citizens could clearly recognize the benefit. The process selected was not without its challenges. Preparing the industries for investment by strategic partners entailed changes which affected the number of employed workers, the adjustment of finances and even dividing some previously combined institutions apart.

The process of seeking strategic partners and developing and completing the bidding the process also required resources which some critics felt could be directed elsewhere more effectively. The maintenance of a transparent, open bidding process is critical in Bolivia and measured in part by the number of bids received. The greater the number of firms interested in becoming a strategic partner, the more honest and above board the process was recognized as being. In fact the economics of the international market had much to bear on the number of bids received. For example only one economic bid was received in the capitalization of the airports.

Yet the amount offered exceeded book value estimates by 150 percent. Defending criticism and communicating the international market's view of many of the Bolivian industries was also a time consuming task.

The capitalization process secured about US $1.7 billion in the Bolivian economy. That amount, together with dividends paid by the capitalized companies (totaling another US $50 million), was transferred to the two selected AFPs. The industries in Bolivia which had been identified and targeted for the capitalization process include:

Company	Business	Investors	Invested Amount (cash and equipment)
ENDE	Power Generation	• Dominion Energy, Inc. • Constellation Energy, Inc. • Energy Initiatives, Inc.	US $140 million
ENTEL	Telecommunications	• Euro Telecom International NV • Stet International	US $610 million
LAB	Air Transportation	• Viacao Aereo Sao Paulo (VASP)	US $47 million
ENFE	Rail Transportation	• Empresa Cruz Blanca SA • Antofagasta Holdings PLC	US $39 million
YPFB	Hydrocarbons	• Enron Transportation • Shell Overseas Holding • Amoco Petroleum Company • YPF - Pérez Compac Pluspetrol	US $836 million
		TOTAL US :	US $1.7 billion

The new strategic partners of each of the capitalized companies signed a contract with the government agreeing to invest the money paid to buy 50 percent of the shares in accordance with an agreed strategic plan and to actively manage the new business for a predetermined number of years. The capitalized company is required to cooperate and assist in having shares publicly listed at the request of a shareholder, anticipated to be an AFP, to participate in necessary tasks to take company public, e.g., issuing conforming financial, governmental and exchange filings.

To further facilitate the marketing of these shares, the Regulations provide for the sharing of the marketing costs between the AFPs, independently of the leadership of the operation.

Capitalization Proceeds: Bonosol Payments

The proceeds of the capitalization process (US $1.7 billion) were to be disbursed in such a manner as to have the maximum impact on the average Bolivian citizen. It was decided that each eligible Bolivian would upon attaining age 65, receive a pension payable annually for life. Those already age 65 or over start receiving the pension in 1997.

Objectives

While many critics called for an immediate payment either distributed in the form of shares or cash paid in bolivianos (through the liquidation of shares), the government sought an alternative to this traditional scheme. Problems such as an overwhelming liquidity crunch and difficulty in evaluating the fair market value of shares immediately underlined the impracticality of such an option. Instead, it was decided to segregate the capitalization revenues but to defer distribution until retirement age, even though this option was controversial and would merit intense scrutiny and comment. Although the President and his ministers were criticized, they remained focused on the objectives of the reforms : to ensure that the residents of Bolivia receive regular, ongoing benefits from the proceeds of the capitalization process.

The government identified and sought consensus on several overlapping objectives:

• Secure a recognizable benefit to Bolivian citizens from the proceeds of the capitalization process.

• Ensure no diversion of funds in an attempt to provide a temporary fix to the old system.

• Identify a method to compensate older workers in proportion to their more significant contributions to the companies that were capitalized.

• Adhere to the requirements of the eligible group defined in the Capitalization Law: all resident Bolivian citizens who had attained their majority by December 31, 1995 (estimated to be approximately 3.5 million Bolivians).

• Conform to the Capitalization Law in the holding and management of assets until payments are made to recipients.

• Avoid problems associated with a liquidity crunch by not forcing the sale of the shares of the capitalized companies at one time or establishing a scenario in which millions of sellers individually flood the market with their shares.

• Allow for an orderly liquidation of the shares through a process which allows for the capture of future increases in the market value.

• Ensure administration of the disbursements through AFPs, independent of government management, but with government oversight.

• Ensure smooth administration and ease of communication.

There was a strong sense that the eligible Bolivians had not contributed equally to success of the industries that had been capitalized. Older workers were recognized as having made more significant contributions than workers with considerably less time in the workforce thus moving the consensus away from a distribution of shares or amount of equal present value. There was also a desire to make recurring payments rather than a one-time amount, so that a sustainable increase in standard of living was achieved, increasing the demand side of the economy, while avoiding flash in the pan inflationary pressures. Continuous payments then raised the issue of whether everyone entitled to a payment should receive the same or varying amounts and if different amounts, how to explain, manage and monitor the different payment amounts.

An alternative was whether immediate lump-sum payments or payments spread over a period of up to ten years would be as effective as payments to a recipient during retirement. It was recognized that in the case of an immediate distribution, measures would have to be instituted that would encourage workers to invest their payments for retirement as opposed to spending them.

The marketing of the shares of the capitalized companies will be made from an actively managed portfolio referred to as the *Fondo de Capitalización Colectiva* (FCC). from which the payments referred to as *bono solidario* (Bonosol) will be made annually to eligible recipients.

The consensus moved towards distribution of the payments in equal amounts for life on a nominal basis. Equal payments were deemed easier to administer, easier to accept by the public and provided predictable cash flows for the asset managers, all of which had been identified as concerns. The equal payment methodology ensured, moreover that the cost of administering the Bonosol payment and the management of the FCC portfolio could be secured economically.

Equal payments that begin immediately or within a short waiting time for older workers and a longer waiting period for younger workers result in higher present values for immediate recipients than for workers retiring later. The bigger share of the FCC ultimately, will be received by older workers who ostensibly contributed more to the success of the companies which were capitalized than younger workers just entering the labor market.

Even though each eligible citizens is the owner of individual rights these cannot be inherited and the assets of the FCC are not individually divided nor managed in separate accounts for each Bolivian citizen. Such an alternative was suggested but rejected as incompatible with the principle of a defined benefit promise which rests on the solidarity of the recipients as is the normal case for social programs. Instead, annual payments are made from a single pool managed and administered by the AFPs, within the investment policy guidelines of the pension regulations. (In theory, one could calculate the actuarial value equivalent to the individual rights but such values are statistical averages valid for a group not for single individuals. To put in each individual account the correct initial amount on which to credit the returns and from which to pay the benefits would require an actuary who could determine in advance the date of death of each individual recipient; we are still waiting!)

A concern was raised whether actively managing the funds and waiting until recipients are age 65 or over to collect benefits conformed to the Capitalization Law. After careful review it was determined that neither the spirit nor the letter of the law was compromised.

The Bonosol Payment Process

The concept of equal payments requires that in a given year all recipients receive the same amount even though their individual pension start to be paid in different years. Thus any recalculation will equally affect all future payments. Since the FCC needs be self supporting, fluctuations in the return on assets, mortality or adjustment in the data base will be reflected in future payments.

The eligible group estimates were based on census data that was unproved. No reliable determination of the total group will be complete until all eligible recipients register with the Superintendency, a process which will be complete after five years.

The first such recalculation has been delayed five years at which time the data base adjustments will have been terminated, thus eliminating this factor as a source of variations. It was also recognized that during an initial period it would be difficult to correctly assess the market value and that a recalculation would have put counterproductive pressure on the management of the assets. Finally, a better estimate of the mortality experience can be developed during that longer interval. Thereafter, the FCC will be reanalyzed and the amount of payment adjusted triennially. Recalculation at five or three year intervals allows share price changes to be smoothed over. At each recalculation, the amount payable will be modified, up or down, to make the actuarial present value equal to the value of the assets. During each interval, the amount payable in bolivianos will be calculated on the basis of the value of the US dollar established at the last recalculation. It is estimated that the initial amount will be close to US $250 per year.

It should be noted that the calculation will be made in US dollars although the payment is made in bolivianos; thus a reduction in the value expressed in US dollar would not necessarily result in a reduction in the actual amount payable in bolivianos which in some years could make an adverse fluctuation easier to accept. The setting of the initial assumptions is a judgment call between equity for the older citizens who would favor aggressive assumptions and equity for the younger citizens who would favor conservative assumptions. The challenge is to determine the most reasonable and probable assumptions for which the likelihood of paying initially too much is equal to the likelihood of paying too little. The initial payment amount was determined by analyzing the eligible group, projecting their life expectancies taking into account future mortality improvements, factoring an investment growth rate of the FCC pool and using the original share valuation at the time of capitalization.

This process calls for three special comments. First, even though the assets are split between the AFPs, the amounts payable will remain uniform and the Law provides for equalization of the funding ratios through asset transfer; the assets form a single pool even though each AFP manages a portion and similarly, the liabilities are calculated in aggregate even though the mobility of recipients may result in one AFP making more payments. One option considered and then rejected was to transfer FCC assets between AFPs each time a recipient transferred.

Second, the experience may be favorable or adverse. If favorable, payments will increase faster than anticipated and the difference in present values between older and younger citizens will narrow. (It is practically impossible to forecast a reversal of the difference!) If adverse, the younger generations will receive less than anticipated, which even though unlikely is not impossible. This risk was deemed acceptable since the younger generations will have accumulated larger sums in the FCI and thus the Bonosol will represent a much smaller portion of their retirement benefits. This is in the nature of an intergenerational transfer much smaller than usual under PAYGO systems!

Third, there is a maximum limit to the adjustment at any recalculation date to smooth out fluctuations. A requirement that adjustments are limited to 25 percent upward or downward was included to avoid wide temporary swings in the payments in the event there are significant changes in the factors used in the actuarial recalculations. It is expected that at the first recalculation, due to a data base lower than expected, the maximum limit will apply thus creating a buffer for the next period.

The ability of the AFPs to liquidate shares to meet payments and to create cash to permit a more diverse pool of investments with the proceeds was also a key concern. Clearly, the method of payments chosen would affect their ultimate value through constraining the AFPs liquidity (in the return versus liquidity trade-off). The scenario all parties were concerned about avoiding was one in which there was a forced sale of the shares, driving down the price at which the AFP was forced to sell and putting at risk the ability of the FCC to sustain the growth necessary to fund future payments.

Implementation of a disbursement scheme in which a staggered payment schedule was followed for all eligible citizens provided a greater opportunity to plan the sale of shares for favorable market conditions thus assisting in liquidity problems. The planned payments disbursed over a 80 plus year period greatly facilitated the liquidity issue over time, but liquidity during the initial years still poses a serious challenge to the AFPs for creating diversification in the portfolio and meeting Bonosol payment deadlines.

To overcome these problems a scheme to market the shares was discussed. The preferred long term solution is to list the shares on international and domestic stock exchanges. The capitalization contracts provided for this necessity and outlined the participation requirements of the company management listing the shares on public exchanges. Despite this provision, another alternative was still needed for the period prior to the shares being listed on public exchanges. The investment policy of the pension regulations was expanded to permit the AFPs to promote and market the shares to institutional investors, issue depository receipts or create baskets of shares of many companies.

Diversifying the portfolio would have been more complex if the FCC and the *Fondo de Contribuciones Individual* (FCI) were maintained separately. Following the premise that increased diversification generally is achieved more quickly at a lower cost with a larger amount of assets than a smaller amount, the FCI and FCC were planned to be managed together. As shares of the capitalized companies which made up the FCC are liquidated, the proceeds would be directed to one of two alternatives: disburse Bonosol payments or invest in units of the FCI. The inflow of cash to the FCI is generated from two sources: ongoing contributions from the affiliates and the employers and from the FCC sales of capitalized shares. Similarly disbursements from the FCI result in payments to recipients of FCI benefits: retirees, disabled persons, survivors and to the FCC to make continuing Bonosol payments. Eventually, there will be only one pool of assets invested in the market, per AFP, with the FCC holding units in that pool.

In order for a recipient to make a claim for a Bonosol payment, the following must be met: has attained age 65 and registered having provided proper identification which can be a *numero unico asignado* (NUA) or a RUN (Registro Unico National) number. The largest group of citizens which has not been assigned a number are those working informally, outside the acknowledged tax system, and include a large percentage of self-employed individuals in rural areas. One side benefit to the requirement that eligible recipients must be registered and assigned an NUA or RUN is that it provides a needed incentive to encourage Bolivians who normally would not perceive a real value in registering to do so.

The eligible recipients for the first year payments in 1997 include those individuals who attain age 65 in 1997 or in earlier years. The Bonosol payment plan does not provide for payments to individuals prior to 1997 regardless of their age.

Eligible recipients are assigned to an AFP. In the first five years (the term coincident to the constant fee schedule and the exclusivity contract between the AFPs and the government) the recipient may transfer between AFPs only in the event the recipient has relocated to an area of the country not served by the originally assigned AFP. In such cases there is no transfer of assets between AFPs as the shares are not held in individual names but a payment is generated from pooled funds. The basis of assignment is that Bolivia has been divided in two parts: A, northern and B, southern. All residents in the north, part A, are assigned to the AFP Futuro of Invesco, Argentaria, and Magister while residents of the south, part B, have been assigned to Banco Bilbao Vizcaya AFP. The exceptions are the cities of La Paz (and El Alto), Santa Cruz and Cochabamba. In these three metropolitan areas assignment is a function of odd/even division by date of birth. Both AFPs operate fully in the three metropolitan common areas and are generally independent in their assigned territories.

The recipient makes a claim at the office of the assigned AFP and presents a NUA or RUN identification. The AFP verifies the recipient information in a data base provided by the Superintendent of Pensions and issues a check on the spot. Any prospective recipient who is not reflected in the Bonosol data bases is instructed by the AFP to become registered in order to receive the annual payment.

In large and small metropolitan areas the AFPs will typically provide offices in which the recipients can make a claim during regular business hours. The offices would also support the functions and provide services to the employers and affiliates under the terms of the FCI. Such overlap permits a more economical approach to AFP customer service.

The AFPs were originally concerned about the requirements of making payments in areas difficult to reach by commercial transportation in which the population was small and widely dispersed. The concerns were that the cost of meeting these recipients' needs by establishing infrastructure where little or none previously existed, would raise the cost, ultimately passed on to all recipients. To reduce the negative financial impact, the government agreed to permit a more informal process of reaching these widely spread recipients in rural remote areas. For example one option is not to require in these areas that an office be established, but instead permit the AFPs to use other facilities such as a local store or a mobile unit. Further since these payments are annual it was considered appropriate to permit the AFPs to make limited excursions in these areas to facilitate claims. Also it was recognized that these areas generally would have limited activity related to the FCI which would further restrict the cost-effective opportunities to service these communities in the early years of the program.

Funeral Payments

A very real concern was raised by different groups regarding the potential for fraud. No program similar to the Bonosol payment had ever been put into practice in Bolivia before and the potential for fraudulent claims was unknown. To offset potential problems a significant focus was made on ensuring that the proper recipient was issued the Bonosol payment. Although time consuming, the use of the data bases, the NUA or RUN and their accompanying identification cards and the verification with the assigned AFP are all designed to reduce the incidence of fraud. Another possibility of fraud was anticipated from family members of deceased recipients. Once the payments began there was widespread acknowledgment that family members grown accustomed to the income would have no incentive to notify the government to stop the payments upon the death of an elderly relative. Then to provide an incentive a funeral payment was structured. For those family members who have borne the cost of paying funeral expenses for an elderly relative, beginning in 1997, the AFPs will reimburse these costs. The requirement is that the family member seeking reimbursement provide proof of the funeral expenses (receipts), death certificate and the NUA or RUN identification card of the decedent. For notifying the government of the Bonosol recipient's death, the AFP will reimburse funeral payments up to US $200. The AFP notifies the Superintendent by way of updating the databases and the recipient record purposely reflects no new payments can be issued.

Solvency Risk of FCC

There were frequent questions as to which party assumes responsibility for the solvency risk of the FCC. The Law was designed specifically so that the AFPs are not liable for the solvency of the FCC; the costs to the recipients would have been prohibitive if that had been a requirement and more importantly it was not necessary. Instead, the risks are supported collectively by the eligible Bolivian citizens. Given the size of the group, it was deemed advisable not to seek an insurance guarantee which would have required the payment of a risk premium, but to follow the method described above.

Development of the New System

The government officials who built the structural framework studied the pension systems of other Latin American countries. They collected examples of internal assessments completed by officials from the Superintendent of Pensions of Chile, Peru and Colombia and compared the Bolivian situation with the efforts of other governments using as needed strategic advisors to explore alternatives and test models. The resulting system utilized studies and alternatives created in other parts of the world but which were then modified and customized to respond to the needs of the Bolivian context through the choices made by the Government Officials.
The decision not to clone the Chilean model and select two AFPs only by international licitation were bold strategic political decisions. The pledge to creating a viable, self-sustaining pension system was further demonstrated by the level of the President Lozada's and Minister Revollo's involvement in the discussions and debates on contributions, retirement age, benefits, one versus multiple systems, and in the transition from the *sistema de reparto* to the new AFPs.

The new system was developed in stages: phase I, designed through 1994; phase II, a modification issued in July 1996; and, phase III, the final version which became law in November 1996. Phase I contemplated an inclusive wish list of benefits that many groups felt were important but a financial analysis completed in early 1996, indicated the plan would not meet its pension targets at an acceptable cost. Phase II curtailed the expansion of benefits and reexamined each structural element to identify areas of modification which would provide similar benefits but without creating a system that would be as financially unsound as the current system or phase I proposals. (Measured by the present value of the projected deficits, continuation of the current system had a price tag estimated at US $3.2 billion, phase II (still with two systems in place) was estimated to necessitate over US $3 billion assistance from the Treasury.)

Phase II reduced cost by raising the retirement age and redesigning some benefits. As it provided no incentive bond or compensation for affiliate transfers to the new system it was expected that only young participants would effectively choose to transfer. Thus a flow of contributions would remain available to pay the pension of their retired cohorts while future retirees would generate lower costs due to the changes described above. The fiscal impact was maintained within acceptable limits on a year-by-year basis but its present value cost remained high as ultimately the unfunded liability of the PAYGO system had to be liquidated over the long term.

The July 1996 draft law met three important criteria: extension of coverage, three times more workers would become eligible for benefits than under the old system; application of equity, different groups of workers received similar benefits; and financially sustainable.

The phase II version, while generally regarded as a significant improvement over earlier proposals solely on the basis of financial solvency, resulted in a number of complications which had not earlier been identified.

There was a recognition that a so-called sandwich generation, affiliates not yet qualified to receive full benefits under the PAYGO but for whom there would not be time to permit an adequate buildup of individual account values to meet the minimum requirements benefit commencement. This posed a real concern in that there was a perception that this group would be sacrificed for the good of the whole program. The final decision to terminate the *sistema de reparto* was partly driven by a lack of alternatives for this sandwich generation. By closing down the old system and establishing a limited but nonetheless accountable process through the guarantee of *Compensacion de Cotizaciones*, this group was clearly in a better position than if two systems co-existed.

The version ultimately adopted in Phase III and promulgated November 29, 1996 mandates the transfer of all active affiliates, except those already eligible to retire, to one new system. It also met these criteria but with a lower and different incidence on the fiscal costs.

The difference in the fiscal impact results from a combination of factors. First, the mandatory purchase of 15 year TGN Bonds by the FCI alleviates the immediate pressure on the Treasury for continuing the payment of the pensions already vested or in process of becoming payable. Second, is the issuance of *Compensacion de Cotizaciones*, which defers the claim on the Treasury until after the retirement of each ex-FOPEBA affiliate, in most cases at age 65. Finally, there is an immediate halt to the growth of the liabilities under the *sistema de reparto*, thus saving the projected gap between future benefits and future contributions.

In aggregate, the changes reduced the present value of the deficits by approximately US $1 billion while maintaining the annual fiscal costs within acceptable limits as illustrated in the Graph A : the projected fiscal cost peak at 1.6 percent of GNP in 2013 whereas without reform it goes through that level in 2031 and keeps going up.

GRAPH A

Two Systems Transferred into One System

The transition process from the *sistema de reparto* to the new AFPs is complex and poses an enormous challenge to the *Secretaria Nacional de Pensiones,* theAFPs, the *Superintendencia de Pensiones* and his staff, Treasury staff and a variety of other ministries, the employers and affiliates and to FOPEBA, FONCOMs, and virtually every party involved.

The goal of the transition is to organize in a series of coordinated stages a number of tasks which automate, account for, and record the old pension systems of the last fifty years so that this information can be secured, analyzed and selected data transmitted to the AFPs. The enormity of the operation is further complicated by the aggressive time frame set by the president, the desire to implement simultaneously the new system thus requiring information about non participating employers, and the overlap of commencement of the Bonosol payments.

<u>Data Transfer</u>

To properly transfer records to the AFPs they must first be created. Currently the majority of data on the *sistema de reparto* contributions and employer and affiliate data is not compiled in one central automated source. Thus the first step in transferring the data is to collect it through the assistance of employers who have been forwarding contributions on behalf of their workers. This process is going on now in Bolivia.

The employers have been provided pre-formatted diskettes by the Secretary of Pensions staff with instructions to record indicative affiliate data (name, identification, date of birth), salary information and summary information on each business and return the diskettes for immediate uploading. This initial data forms the data bases which the AFPs will use in the transfer of affiliates and the redirection of their contributions. From this initial exchange of information the AFPs can begin to build a profile of each employer/business assigned to them, the number of workers and their salaries. The AFPs begin to analyze the data, identify missing or contradictory transmissions and project contributions. The expectation is that the initial transmission will generate at least a 60 percent to 80 percent accuracy level of an exchange of data. Subsequent rounds of requesting and uploading missing of incorrect data will occur until there is a higher level of accuracy in the data both of the Superintendent of Pensions and the AFPs.

It is at this point that contributions can be redirected to the AFPs and the official commencement of the new system will become reality for the workers and their employers.

Simultaneously, the *sistema de reparto* will need to continue the process of records automation as another transfer of data to the Superintendent of Pensions for transmission to the AFPs will require an identification of the period of coverage for purposes of establishing the *Compensacion de Cotizaciones*. Further, a process by which this information will be communicated to the workers and a timetable enabling them to understand the values assigned to their previous contribution to the old system must be developed. There is a concern that the data thus far, maintained predominantly on paper in multiple formats in multiple locations with no method of review to determine if data is inaccurate or missing, will be highly inaccurate in calculating this amount. The method available to workers to make a claim for a different amount to the *unidad de recaudación* is laborious and itself prone to error or even fraud. Workers who question the validity of the data of *unidad de recaudación* will have no choice but to return to their places of former employment and receive a certification confirming years of employment, salary levels and proper participation in the PAYGO system.

Treasury

Continuation of payments to current retirees will be assumed by the Treasury. They must develop as well a transition process which includes transferring information and records from FOPEBA, FONCOMs and others. Affiliates who are eligible to claim a full retirement benefit under the old system (they have satisfied the revised age and service requirements) but who have yet to make a claim will also receive payments from the Treasury. There was a specific intention to avoid a flood of requests of current eligible retirees initiating benefits at the time of the system transfer. By assuring these recipients eligible to receive full benefits under the old system that their benefits entitlements were unchanged, it was anticipated that the overwhelming rush of applicants to initiate benefits can be avoided.

The rationale to have the Treasury make these payments is to avoid the implication of the AFPs in the payment of benefits from former systems which do not fit their administrative system. A substantial effort would be required to create and manage the process necessary to calculate and make payments to retirees and survivors designed to last a finite number of years, unlike the functions of the AFPs which are expected to grow and improve on an unlimited time horizon. The number of payments generated by the Treasury is projected to rise steadily for the next ten years and followed by a sharp decline for the following ten years and thereafter little continued administration of payments is projected.

Other Treasury functions to be developed and managed include, first, providing a mechanism for AFPs to buy Treasury bonds in accordance with the terms of the exclusivity contract between the AFP and the government; and, second, providing a mechanism to transfer assets to the AFPs annually to meet the obligations for the *Compensacion de Cotizaciones* for affiliates who were transferred from the old system and will begin retirement benefits in future years.

Disability

Two issues common to both workers compensation and common risks are:

1) the qualification of claims to receive a benefit, termination of benefits at death or attainment of age 65, and;

2) the continuation of the funding of the affiliate's individual retirement account during the period of disability.

A major difference between the PAYGO system and the new AFP system is that now each affiliate has an individual account in which contributions and earnings accumulate. In the event of disability an affiliate can no longer make contributions to his or her individual account. Thus a significant change in the benefits paid for common or professional risk is the dual role of both paying the affiliate during the injury/recovery or permanent disability period and the continuation of contributions to an affiliate's individual retirement account. Both benefits and continuation of ongoing contributions are paid from *the cuentas de riesgos comun* or *riesgos professionales*, "common risk accounts" or "professional risks", until the coverage is taken over by the Insurers.

The design specifications of the disability schemes provide for the methodology of paying benefits and the continuation of affiliates' contributions. No partial disability benefits are provided for common risk. In the event the affiliate never recovers from disabilities, at age 65 the disability benefits cease and retirement benefits commence. The individual account of the affiliate is then used to pay benefits and funds are no longer withdrawn from the cuentas to pay benefits or continue contributions. Thus an affiliate is not penalized by a period of disability but cannot either play against the system by claiming shortly before retirement age a disability pension higher than his retirement pension would be.

The workers compensation benefit has been revised in the new system to permit for claims under full or partial disability resulting from injury, illness or death relating to an incident resulting form professional risk. The AFPs will administer workers compensation benefits to affiliates where their claim for disability is made as a result of an incident incurred while covered under the *sistema de reparto* or the new system. This is the only obligation of the old system that the AFPs have to administer from the starting date; their incur no solvency risk for these benefits.

Until the coverage is underwritten by insurance companies, the contributions for workers compensation and death/disability benefits will be managed in *cuentas* separate from each other and from the individual affiliate accounts within the FCI. The monthly contribution is 2 percent of salary for each *cuenta* but workers compensation is funded by contributions from the employers, submitted at the same time as the mandatory contribution for salaried workers.

The workers compensation *cuenta* is used to pay benefits to affiliates or survivor death benefits to their beneficiaries, if the medical unit created by the Superintendency determines it is a work related accident, sickness or death. Except in special circumstances, workers compensation is not collected from self-employed participants since these are not eligible for such benefits.

Other Benefit Revisions

A significant difference in the present value of benefits which resulted from a change in closing the old system and transferring affiliates and their contributions to the new system is an increase in the effective average retirement age from age 55 and 50 for men and women respectively to an age anticipated to be closer to 65 for many participants. An increase in the retirement age reduces the remaining obligations of the PAYGO system by reducing the number of payments and postponing their commencement.

The expansion of the definition of what constitutes normal retirement age under the new system also greatly benefited the sandwich generation as well as others. No longer were age and participation the sole determinants of when an affiliate could begin to receive payments. Greater control was given to the affiliates through the leveraging of the additional contributions.

Purchasing Power Protection

In a country which has experienced historically high rates of inflation in the not too distant past as Bolivia the concern to link benefits to a benchmark of a stable nature is a real concern. The benefits payments in the earlier versions of the law was linked to the value of the boliviano and a factor equivalent to 90 percent of the Bolivian Consumer Price Index. The final version of the law revised this issue to provide a link between the boliviano and the US dollar.

Guarantees

At first the concept that affiliates and their survivors had a right to a minimum guaranteed benefit was one that many regarded as invaluable. Upon closer examination, though, it was identified that in fact previous benefit calculations did not provide a guarantee of minimum payments nor did the Bolivian Constitution provide for such guarantees.

The Bolivian government does not underwrite or guarantee the solvency of the AFPs. The AFP is monitored and reports to the Superintendent but the AFP's own assets are held separate and cannot be mingled with the assets of the affiliates. The ability of the AFPs to meet the obligations of the variable life annuity payments are solely a function of the accumulated account value of the affiliates and market fluctuations. For those affiliates who are more comfortable receiving a payment that is guaranteed, the regulations provide that an annuity would be purchased by the affiliate with the account value proceeds. Then the guarantee is provided by the insurance company which in turn is regulated by the Superintendent of Insurance and has to satisfy minimum reserve requirements to meet its payment obligations.

Further, neither the government nor the AFPs could guarantee that an employer will properly forward withheld amounts to the AFPs. Under the previous system employers who failed to forward contributions or workers who failed to have the employer withhold did not perceive that they were directly affected by their evasion. In the long term of course, a higher subsidy was required from the tax payers.

Under the new system of individual accounts, an affiliate whose employer does not forward contributions can be identified more quickly such as when the AFP annual statement is issued to the affiliate. While even a delay as much as up to one year in discovering fraudulent activity is not ideal it is still a dramatic improvement over the safeguards of the old system in which it was possible for an employer to delay discovery until a worker made claim for retirement benefits, theoretically a period of 25 or 30 years or longer. Of course evasion by the worker directly (as opposed to through the employer) results in an immediate disadvantage but only to that employee. Gone would be the sense that evading the system was an acceptable form of tax protest. Failure to contribute has a direct and immediate impact on the worker who exercises the decision and would no longer be penalizing all affiliates, those fairly contributing and those not.

State of the Insurance Industry in Bolivia

At the time of the passage of the Pension Law, the insurance industry in Bolivia was interested in participating as provider of life annuities to retirees and survivors and to receive premiums for the workers compensation and common disability risks and to pay death or disability claims as provided. However, the industry had to balance its keen interest in participating with a realization that the resources of the domestic industry were inadequate to ensure that the payments could be made. As an interim solution a negotiated compromise was reached that once they were able to meet stipulated requirements in the law, they could fully participate in the system. A predetermined time period was not set on them but rather left up to the Superintendent to decide when the requirements were met. Such an interim period was also necessary to effectively classify the Employers by level of risk and to accumulate statistically significant experience.

The projected aggregate premiums for death and disability payments was high by comparison to the existing market. The purpose of setting requirements was to ensure that affiliates or survivors who transferred their account value to insurance companies were not being exposed to greater risks.

By the time the insurance industry is ready to takeover the coverage, the AFPs will no longer continue to collect and invest the premium but will transfer those funds to the insurance industry. The services of *riesgos comun* and *professionales* must be bid out by the AFPs. No one insurance company can be selected by more than one AFP to avoid any kind of a monopoly. Also the same insurance company must the underwriter of both common and professional disability claims. This is designed to avert the issue of one insurance company stating that a benefit is common or professional when it has one and not the other. Finger pointing from a claims management standpoint is therefore avoided.

<u>Riesgos Comun and Riesgos Profesionales</u>

To ensure fairness of treatment of all affiliates, a Qualification Manual for death and disability claims is to be established by *Decreto Supremo*.
Under the Superintendent of Pensions and until the Insurers take over the coverage, a new medical unit will evaluate claims to determine what is a disability, issue rulings as to type of disability (workers compensation or common, partial or full) and authorize the AFPs to pay claims. The Superintendent is responsible to adjust the premium annually to maintain the solvency of the *Cuentas* and to proceed to transfer of assets between AFPs to maintain an equal funding ratio. The assets of the *Cuentas* will be transferred to the Insurers at the time they will assume the risks.

Catastrophe Fund

Another measure of risk management provided for under the Pension Law is a method by which the impact of a catastrophe occurring and causing financial unbalancing of one AFP over the other. Up until the time the insurance industry takes over the *cuentas riesgos comun* and *profesionales*, the Superintendent will maintain an equal degree of solvency between the *Cuentas* administered by each AFP. After the transfer to insurance companies has taken place, a stabilization fund is created that has a smoothing out effect in that it is a fund into which the insurance companies accumulate experience gains so that in the event of a catastrophe, as determined by the Superintendent of Pensions, neither AFP is unfairly burdened, e.g., the catastrophe has no greater impact on one AFP financials as over the other, which would induce massive transfers. The end result is to lower the risk premium required to cover catastrophic events by extending the assessment basis to the whole country.

Development of Regulations

Throughout the development of the revised law, the development of the regulations was concurrent which assisted in the fine-tuning of all the issues. The bidders and others commented that Bolivia was much further along in implementing their pension reforms as observed by the level of detail they were prepared to address at the one-on-one conferences in La Paz.

The regulations consisted of:

- Investment Policy
- Superintendent Oversight
- Processing, Accounting Requirements
- Benefit Calculations
- Common Disability
- Workers Compensation
- AFP Structural Requirements and Standards
- Affiliation Requirements
- Bonosol Payments

Benefits

The structure of benefits payment, generally regarded as the cornerstone of any retirement system, was designed to provide a secure replacement income for retirees and their survivors.

The FCI was structured to allocate each affiliate's monthly retirement contribution of 10 percent of salary into a separate account controlled by the individual; there are no Employer retirement contributions. Earnings on the contributions that the AFPs invest are also allocated on an individual account basis so when the AFP issues the affiliate's account statement, the value of the contributions plus earnings are accurately reflected. To ease the transition, salaries of participants to the *sistema de reparto* were increased by at least 4.5 percent, representing previous Employer contributions to the *sistema de reparto*.

Other contributions, such as an additional 2 percent of salary contributed by the affiliate for common disability and 2 percent of salary contributed by the employer on the affiliate's behalf for workers compensation, are not allocated to an affiliate's individual account. Instead, until they are paid out as insurance premiums, these amounts are aggregated by each AFP into distinct collective accounts in the FCI: *cuenta riesgos comun* and *cuenta riesgos profesionales*.

The value of the individual affiliate account is the basis of the calculation of retirement benefits. The collective accounts of the *cuenta riesgos comun* and *cuenta riesgos profesionales* are the source of payments to the affiliates, or their survivors, in the event an affiliate can no longer work due to partial (applicable only in cases where the disability is determined to be related to workers compensation) or full disability or death resulting from work or non-work related illness, injury or accident. The *riesgos profesionales* is used to pay benefits under work related disability for those workers who incurred the disability while contributing either to the *sistema de reparto* or to the AFP system.

Voluntary Contributions

A common criticism of the payment of benefits under PAYGO systems is that affiliates cannot control when their payments commence nor do they permit flexibility in the commencement of benefits which coincide with when an affiliate needs the payments. Thus, an improvement which was recognized in the new system is to permit voluntary contributions to the individual accounts, in addition to the basic 10 percent. They were designed to give workers the ability to have a greater impact over their individual account value and therefore greater control over the time at which benefit payments begin. The requirement to be eligible for pension is an account value sufficient to produce a replacement ratio of at least 70 percent of the average final salary of the worker based on at least 60 months of contributions. A worker can control the opportunity to enjoy early retirement by funding the maximum, including additional amounts, during the accumulation years.

Retirement Benefits

Retirement benefits will be paid provided an affiliate's accumulated account is sufficient to fund retirement benefits equal or higher than 70 percent of 5 year average annual salary, regardless of the affiliate's age. The test will be on the basis of the MVV option. Alternatively affiliates can elect to request commencement of benefit payments once they reach age 65, regardless of their account value. Accounts not sufficient to fund a life annuity equal to 70 percent of minimum wages will be paid out in installments.

For affiliates who transferred from the *sistema de reparto* after having made at least 60 contributions, a deferred annuity amount which reflects their contributions to the old system is be collected from the Treasury by the AFPs or the Insurer and will be reflected in the benefits paid to the retiree or survivor. This amount counts towards the 70 percent requirement described above. This deferred annuity, the *Compensacion de cotizaciones,* is described in Art 63 of the Pension Law and corresponds to 2.8 percent per year of contributions, of the last salary on which contributions were made. For affiliates with less than 60 contributions, a lump sum is payable. The cost to the Treasury is estimated at US $ 400 million and is incurred gradually over the retirement years of the future retirees as opposed to the earlier disbursements that would have been required by Recognition Bonds.

Death and Disability Benefits

The disability benefits for a not related to work injury or illness, as determined by the medical unit, is a pension equal to 70 percent of 5 year Average Basic Salary for affiliates who have incurred full disability. Eligibility ceases at retirement but no later than age 65 and is subject to a minimum number of contributions in the period preceding death or disability.

In addition, while the disability pension is payable, the 10 percent retirement contribution is paid to the affiliate individual account in the FCI.

Variable percentages, that may aggregate up to 100 percent, are payable to the spouse, children or other dependents in case of death, work related or not, of an affiliate either active or disabled. In case of death prior to retirement, the accumulation in the individual account is used to partly finance the survivors benefits. In case of death after retirement, survivors benefits are provided through the life annuity contract.

Payments Options

The system was designed to permit flexibility in choice of alternative annuity options to either affiliates at retirement or to survivors upon the prior death of an affiliate. The choices included, first, variable life annuity payments, *Mensualidades Vitalicias Variables* (MVV), from the AFP for an amount that will fluctuate in value (increase or decrease) with market conditions and mortality experience; and, second, purchase of a lifetime annuity with a guaranteed payment from qualifying insurance companies

Both types of annuity contracts must provide for the payment of the funeral expense benefits, of an 80 percent reversion to the spouse without children and other percentages for children or dependents. In either case, an affiliate can ask for a guarantee than a minimum numbers of monthly payments (60, 120, 180) will be made in any event, which reduces the amount of the annuity.

Virtually all countries today provide for guaranteed benefits from life insurance or programmed withdrawals benefits calculated on the balance of the individual accounts by the AFPs. The option to receive benefits in the form of a variable life annuity offered under the system of the AFPs in Bolivia is a new concept. The initial amount of variable annuity is calculated by the AFP when the individual account value is transferred to the *Cuenta Mensualidades Vitalicias Variables (MVV)* which is a pooling vehicle.

A variable life annuity is not paid by an insurance company but from the AFP. The payment can fluctuate in accordance with the market value of the FCI units held by the MVV account. Another objective of combining the assets of the retirees electing the variable life annuity payments is to have the benefit of the pooling of the affiliates' mortality to eliminate the risk of an affiliate living past a life expectancy estimation in the case of programmed withdrawals and in essence running out of retirement income. The variable annuity from the MVV can result in a fluctuation in payment (generally, a decrease or increase based on how well is the earnings return on the FCI units which constitute the assets of the MVV). The payment calculation consists of dividing the value of the account (excluding the value of the promise for the Treasury to pay a separate amount in recognition of past years of contribution and participation) by a factor that represents the unit cost of an annuity with the required death benefits at the attained age of the affiliate and of his dependents. The calculation is repeated annually to reflect the evolution of the account which is credited with both investment returns and mortality gains from other accounts where payments have ceased because of death. It will be interesting to see how affiliates who elect that option react to adverse fluctuations in the annual payments when in some years, despite the conversion from US $ into bolivianos, the actual amount of bolivianos payable decreases.

Affiliates who prefer the safety and predictability of a guaranteed payment are provided this option through an insurance company. The affiliate's account at the time of retirement is valued and the AFP forwards the amount to an insurance company if the affiliate chooses a guaranteed annuity and not the variable annuity method.

The insurance company then pays a guaranteed benefit to the retiree and following the retirees death to the survivors. With a guaranteed annuity contract the affiliate does not bear any risk of experience fluctuations. This risk is born by the insurance company. The insurance companies must meet minimum solvency requirements to be eligible to offer guaranteed annuities to the affiliates.

Frequency of Payments

Benefits in Bolivia are paid in 13 amounts each year: one for each month and an extra at holiday time, in December. Annuity factors have thus to be adjusted accordingly.

Development of the AFP Structure

Early on there was recognition that the success of the financial institutions, and therefore the new system, would be greatly affected by how the AFPs were structured. The consensus of many groups was to have more than one AFP selected to ensure a level of a competitive environment. Yet the need for multiple AFPs was balanced against the size of the market (less than US $2 billion in assets under management projected after the first 24 months) which could not support a large number of AFPs. The cost to the affiliate that the AFPs would charge if too many firms were selected would be high.

The decision to select two AFPs ensured competition at the stage in which the prices were established, contract was negotiated and services defined. This provides a safety net through a requirement that if an AFP failed to meet its contractual obligations, e.g., acceptable levels of customer service and meeting certain minimum affiliation requirements among others, the government could authorize that the other AFP could enter the non-performing AFP's market.

Objectives

The general consensus was that the development of the AFP structure include:

• Creation of independent financial institutions.

• Selection of more than one AFP in the initial years with an exclusivity contract.

• Assurance of open AFP competition to allow new AFPs to enter the market after an initial period in which the transition from the old to the new system could be completed with an allowance for the initial AFPs to have a settling in period.

• Mechanism by which the government would establish standards and maintain oversight of the AFPs.

The basic structure of the AFP is an independent financial institution established for the sole purpose of administering the functions of the FCI: collecting and managing pension contributions, investing the assets and calculating and paying benefits; and the FCC: managing assets and paying benefits.

Oversight authority became the purview of the office of the newly created Superintendent of Pensions. The Superintendent nominated by the President is Guillermo Aponte Reyes Ortiz.

Contract

The development of a five-year contract which outlines the terms of fees collected by the AFPs, the agreement with the government for an exclusive arrangement in exchange for commitments from the two AFPs was a complex process. The terms agreed to in the contract included the minimum requirements that must be met by the AFPs. Failure to meet the requirements would result in a penalty asserted by the Superintendent of Pensions.

At the time each AFP agreed to stipulated language in the contract and was prepared to make an economic bid, they were also required to post a bid bond of US $1.5 million. If after posting this bond and the opening of the economic bid, the pre-qualified bidder was selected as an AFP, there was an implied commitment that the agreement would be signed and that the government would not need to go through another bidding process. To further ensure that this was the case, however, the government requirement of a posted bid bond would result in the forfeiture of US $1. 5 million if the selected bidders did not sign the agreement in the time from being selected to the time the AFP had to be established.

Once the contract was settled the government wanted to further ensure that the terms of the contract would be met. Another bond, US $1.5 million performance bond, was required to be posted by the pre-qualified bidders making an economic bid. This second bond only became effective if the economic bid were accepted and the contract was signed. Minor delays or changes to the contract which resulted from a delay on the part of the government did not affect the performance bond, but the outright inability to meet the terms agreed to between the government and the pre-qualified bidder would permit the government to seize the performance bond.

Other minimum requirements were also stipulated in the contract:

• Transfer from *sistema de reparto*
• Redirection of contributions

- Immediate set-up of workers compensation for transferred affiliates
- Payment of benefits
- New affiliates, new businesses
- Commencement of Bonosol payments
- Fianza
- Commissions

Capital Requirements

Another requirement of the AFPs is the funding capital of the new independent financial institution. To ensure solvency and stability of these firms the regulations require that minimum funding requirements be met. Each AFP (whether a single firm or a consortium) will meet the capital net worth requirements of a minimum of 1 million special drawing rights (SDR), currently valued at approximately US $1.4 million.

AFP Services

The services for which each AFP is responsible consists of two parts: *Seguro Social Obligatorio (SSO)* and the Bonosols. The SSO is comprised of those participants transferred from FOPEBA into the FCI and those new affiliates who were not previously participating in FOPEBA but will begin to participate in the FCI. The FCI is a unit-based fund made up of five parts, distinguished by source of contribution, as shown in Illustration A.

The individual capitalization accounts (ICAs) are also known as affiliate accounts and receive the retirement contributions of both salaried workers and self-employed workers. The number of ICAs always equals the number of affiliates. The death/disability account (FDA) is not allocated on a per participant basis but is one pooled fund financed by an affiliate contribution set initially at 2 percent, from which death and disability payments will be paid to both salaried workers and self-employed workers, if qualified.

The variable annuity account (MVV) is not allocated on a per participant basis but is one pooled fund holding the amounts transferred from the ICA for affiliates and beneficiaries who will choose to draw their pension from the AFP and from which the variable pensions payments will be made. The workers compensation account (WCA) is not allocated on a per participant basis but is one pooled fund, financed by employer contributions set initially at 2 percent, from which death and disability payments (exclusively related to workers compensation issues) will be paid to salaried workers and to current recipients of workers compensation payments who at the time of the law's passage are qualified to make a workers compensation benefits claim under the *sistema de reparto*.

The units that make up a growing proportion of the Collective Capitalization Fund (FCC) as the dividends are collected and shares of capitalized companies are sold, which are not allocated on a per participant basis, that should increase initially and then slowly decrease as life annuities are paid to eligible Bolivianos.

ILLUSTRATION A

The AFPs each will manage assets in accordance with investment policy guidelines. However, during the exclusivity period an amount less than the total contributions of affiliates transferred from the old system and not exceeding US $180 million, shall be invested in bonds issued by the Treasury. These bonds shall have a maturity of 15 years or less with coupons initially set at 8 percent.

Eligible affiliates to the system are salaried and self-employed workers, whether or not they have previously been covered by the *sistema de reparto*.

The AFPs are required to:

- enroll eligible affiliates (review identification, complete enrollment form) who have never participated in the old system and transfer affiliates from the old system using an automated enrollment process from data provided by the government; and

- process and monitor per participant monthly contribution from: salaried (dependent) workers at the rate of 10 percent of salary and be able to accept additional contributions: up to an additional 1,500 Bs (US $300); and from self-employed (independent) workers contributions of up to 12 times each year monitoring that each contribution is not less than 25 Bs (US $5) and not more than 3,000 Bs (US $600).

The AFPs are responsible for ensuring the accurate and efficient processing of all employer and affiliate records. They will establish the necessary system to maintain proper records containing the participant name, address, date of birth, employer affiliation, NUA/RUN, and maintain transaction records.

The calculation and payment of monthly retirement benefits requirements consists of receipt and evaluation of the request, identification of the amount of the promise to pay benefits to affiliates transferred from FOPEBA and to either transfer the value of an affiliate's account to an insurance company for the purchase of an annuity or to calculate and pay variable pension benefits based on the value of the affiliate's account.

The AFPs are required to generate annual participant statements and regular reports monitoring the level of compliance and to make reports to the Superintendent as required. Employers will also be provided a confirmation following each contribution submission.

A difficult task for the AFPs is the reconciliation of discrepancies between data submitted by employers and contribution totals. Other functions such as processing notification from employers of participants who terminate employment are also required of the AFPs

Reporting to Superintendent of Pensions

To assist the Superintendent of Pensions in its oversight the AFPs agreed to provide query support for Superintendent to access plan or participant records by providing a computer on-site. Other support to the Superintendent as needed with suggestions on forms, processing and reports is expected.

The AFPs are required to register agents with Superintendent within six months of program initiation. They also are required to assist the Superintendent in ensuring that no affiliate can be registered with more than one AFP, and that both an affiliate's FCC and SSO accounts are with the same AFP.

Assigning Affiliates to AFP

All affiliates currently contributing to the PAYGO system will be transferred to the AFPs, a total of approximately 356,000 workers. The basis of assignment is that Bolivia has been divided in two parts: A, northern and B, southern. All residents in the north, part A, are assigned to the AFP of Invesco, Argentaria, and Magister while residents of the south, part B, have been assigned to Banco Bilbao Vizcaya AFP. The exceptions are the cities of La Paz (and El Alto), Santa Cruz and Cochabamba. In these three metropolitan areas assignment is a function of employer grouping and assignment. Both AFPs operate fully in the three metropolitan common areas and then they are generally y independent in their assigned territories.

Once in the new system, these transferred affiliates and new affiliates enrolling for the first time will be considered the same. There is no requirement by the Superintendent that AFPs provide separate treatment or otherwise distinguish the services to transferred affiliates versus those that previously evaded the system.

New Affiliates

There are over 500,000 workers of officially registered companies who are not currently affiliated with FOPEBA. They represent the single largest group of eligible affiliates for the new system.

AFPs will have the opportunity to enroll affiliates through the employers in group on-site enrollment meetings or on a one-on-one basis and will be supplied information from the Superintendent on these previously evading employers and their workers for this purpose. This information will be provided in another data bases. Each AFP agreed to meet a minimum targets for affiliations in the initial years of the contract.

Amnesty

Further, as these employers and their workers have not yet affiliated in the old system, the government has structured the amnesty program so as to enable the AFPs to promote participation highlighting the advantages of expanded pension benefits, disability coverage and workers compensation, for many of the affiliates for the first time in their lives.

For businesses which affiliate their workers in the first two years of the establishment of the AFPs, past evasion is forgiven. Also, employers and their workers who transfer from the old system to the new program who technically have past due contributions are forgiven any additional penalties when they transfer to the new system provided they submit a *Declaracion Jurada* establishing the arrears which shall be payable over the period ending December 31, 2006.

Taxes

The development of the policy to tax the affiliate on amounts other than retirement contributions resulted in the following amounts subjected to a value added tax. Amounts paid by affiliate: 0.50 percent of salary fee to the AFPs and insurance premiums for death and disability coverage for common risks. Amounts paid by the employers: insurance premiums for death and disability coverage for workers compensation.

In accordance with the relevant *Decreto Supremo* the contributions to the *Cuenta de Siniestralidad* and to the *Cuenta de Riesgos Professionales*, initially set at 2 percent, are not taxable. The role of the AFP in the taxation process is to collect amounts and pay them to the Treasury. Reporting of taxes withheld must also be made to affiliates.

AFP Search and Evaluation Process

Following the trend implemented elsewhere in Latin America the process to create Bolivian AFPs required that a new type of organization be developed independent of the existing domestic financial systems which would be regulated and supervised by a newly created Superintendent of Pensions. As it was the government's intention to attract experienced, world-class firms to provide services as AFPs, the use of independent advisors experienced in pension reform reinforced the market positive perception of the government's commitment to the process.

Evaluation criteria were identified and an international search was undertaken for firms to participate in the creation of AFPs with previous experience in the functions of pension administration: asset management, record keeping and transaction processing, affiliate communication and education and employer support. The goal was to ensure that capable, experienced, financially sound firms would create AFPs.

The evaluation criteria was designed to allow the broadest possible range of qualified firms to compete in an effort to develop an environment which would produce a competitively structured service level commitment and fees.

The following priorities influenced the criteria:

1. Ensure an open, transparent and competitive evaluation process.

2. Meet international standards for asset manager and plan administrator search process.

3. Conform to procedures of Bolivian law for issuance of terms of reference (the government deferred until later in the bidding process many of the initial requirements of the terms of reference under Bolivian law, which were regarded by the international bidders as being too onerous and expensive).

4. Determine in one day the pre-qualified firms by reviewing the responses to the first terms of reference (the government eventually expanded the time allotted for the evaluation to one week,

implementing a quantitative model to analyze whether minimum criteria had been met and to score objective and subjective responses).

5. Announce the selected bidders on live television following the opening of the economic bids (the government met the time allotment for the evaluation of the economic bids (a complex, four part form) by establishing terms of pricing in which market forces dictated the types of fees charged and a quantitative model analyzed the bids).

The search process was designed to include as many firms as possible. An advertisement was placed in international publications announcing the government's intention to initiate a competitive search process for financial institutions to form AFPs in Bolivia. The publications used were: *Wall Street Journal* (US, Europe, South America), the *Financial Times* (UK, Europe, US), and *Pensions & Investment* (US), an industry trade magazine. Responses were directed to the Secretary of Capitalization, Edgar Saravia.

Road Shows

A communication strategy was developed to explain the Capitalization process, outline the initial plan of functions to be completed by the AFPs (both traditional individual account pension administration and the more unique functions of the Bonosol payments), review a proposed timeline and provide an opportunity for government officials to assess feedback from the international financial institution community.

This effort resulted in more than 60 firms initially participating in the government's search through a three week process during which 200 executives attended Road Show meetings in five cities on three continents.

Communication Process

Prior to the use of the Internet as a communication means, the Bolivian government employed a method commonly referred to as a data room. A location is developed (typically not in government offices) in which all relevant information such as: economic reports, industry background information, laws, tax treatment, commercial code, statistical analysis, census and other demographic information was compiled. A data room located in La Paz presents also some inconvenience to international bidders. Further, access to and use of the data room is restricted to pre-authorized individuals (using a special form prescribed by the solicitation/bidding regulations). Frequently, bidders would designate both a locally based law firm representative and a representative of the international bidders. The representatives then have relatively unrestricted access to the data room to enter, research, request photocopies of relevant information. Generally the information has to be shipped by DHL courier (two to three day delivery from La Paz) to the members of the bidding team which needed the information.

Internet and E-mail

The data room method was regarded by the international bidders as costly, time consuming and prone to errors. Many firms interested in participating in the search process objected to the onerous communication procedure between the government and the potential bidders. In an effort to eliminate these objections, an Internet home page was utilized as the key tool for sharing information. The government used a web site management firm to help create a Capitalization home page, reproduced herewith as Illustration B, through which all background economic, demographic, political and cultural information was posted. Updates and the exchange of documents such as draft law and regulations, terms of references, spreadsheets, forms, proposed contract language, amendments, circulars and all other announcements could take place any time. Utilizing a home page on the Internet also permitted the use of high quality graphics to illustrate some of the more complex changes to the proposed systems. Another argument in favor of the creation of a web site was to create a more level playing field given that existing information available to Internet browsers was neither up to date nor completely accurate.

The concept that documents and updates were available to all bidders simultaneously was a great communication improvement as well, especially since many AFP consortia were located on more than one continent in multiple time zones. That innovative communication strategy was designed to coordinate with the overall philosophy that an inexpensive bidding process that fostered competition among quality firms would ensure that the best firms would be selected. For example the two winning consortia both consisted of international partners: Invesco (US), Argentaria (Spain), Magister (Chile), CIDESA SA (Bolivia) and Alianza (international); and Banco Bilbao Vizcaya (Spain) and Banco Industrial SA (BISA) (Bolivia). The remaining prequalified firms which were not ultimately selected were also comprised of multiple international partners.

ILLUSTRATION B

Minimum Criteria

The team researched bidding processes in other Latin American countries as well as other international searches initiated by governmental entities in the US in an effort to ensure inclusion of those factors which would contribute to the search goals being met with a specific desire to avoid replicating problems encountered elsewhere. These researched issues were detailed in writing and helped form the basis of the development of the strategy of objective/subjective analysis of response from bidders. The team also recommended the use of weightings in the responses to the technical subjects being evaluated and designed a scoring system for use in the final selection of the short list of bidders.

Each firm or consortium (described in the following section) was required to meet all of the following first-level pass/fail criteria:

- Asset management: experience managing more than US $10 billion in assets and experience as international asset manager: 20 years or more altogether, at least 10 years international.

- Pension administrator/record keeper: process over 5 million transactions annually, more than 100,000 affiliate accounts, more than three plans with multiple employers, previous experience in Latin America.

- Affiliation: experience with enrollment of multiple employers and more than 100,000 affiliates.

- Agreement to meet Bolivian bonding, licensing and registration requirements.

Consortium Definition

A consortium of more than one firm was permitted to bid recognizing that the best services in each of the above areas qualification may not be housed in one firm. The asset manager was required to be the consortium leader in recognition of its important role as a manager of FCC assets. The US $1.7 billion was an amount equivalent to approximately 25 percent of the gross domestic product (GDP) of Bolivia. Such a substantial portion of the nation's wealth would only be entrusted to high quality, experienced asset managers. The government was heavily criticized in it decision to require 20 years international experience with a minimum of $10 billion in assets under management. Charges that the government specifically sought to establish a benchmark that could not be achieved by the Chilean AFPs alone were leveled throughout the bidding process. In fact the standards are typical of international bidding specifications and not reflective of a desire to discourage or discredit Chilean participation. The original bidding group of twelve reflected many Chilean names and one of the consortia ultimately selected included a Chilean AFP. Further, Chilean AFP's would be disqualified because of their lack of international investment management experience as evidenced by the fact that less than 2 percent of the Chilean pension assets (valued at approximately US $26 billion at the time of the Bolivia bidding) was invested outside of Chile. Finally, it was widely recognized that the Government would come under intense scrutiny regardless of the final definition of minimum criteria once the turn-over of US $1.7 billion in assets to foreign firms would be authorized. To succumb to political pressure just to avoid one type of criticism would have exposed the Government to another criticism, i.e., failure to follow sound financial principles.

The consortia were allowed to be composed of multiple firms and one firm could provide more than one service, as long as the consortia were not reorganized or members replaced with new firms. Eventually the government agreed to modify this last requirement as each consortium learned more about the process and to conform to continually changing parts of the Pension Law. In fairness to both the potential bidders and the ultimate affiliates the amendment to the terms of reference permitting a redefinition of consortium enabled the strengthening of many consortia.

Initial Bids

Twelve firms/consortia from the initial group of 60 which expressed interest in participating in the bidding process actually presented written proposals in response to the first Terms of Reference. The purpose of this first set was to ensure that firms which, in the second phase, would be allowed to present economic bids, met the necessary qualifications.

There were several reasons which accounted for the reduction in the number of bids received when compared to the size of the group which initially participated in the process. On the basis of informal discussions both with firms that bid and those that chose not to bid, the responses were focused on a few key issues. First, the twelve consortia represented the grouping of more than 25 separate firms. Second, the requirement that the asset manager be the lead firm in a consortium led some asset managers to express reluctance to engage in the process citing their inexperience in evaluating the skills of the firms needed to complement their area of expertise (i.e., asset managers don't know how to select administrators).

A third objection to forming a consortium was the short time period permitted to evaluate firms and build a consortium. Other firms questioned what would happen if one consortium would have the best asset manager and another the best enrollment team while others have better administration and record keeping members. They questioned if the government would not rebuild the consortia to suit its needs. While the government recognized the importance of the issue, it was argued that it is better to let market forces and experience shape the form of a consortium. It is wiser for the government to maintain an arm's length relationship with the AFPs it will then regulate and supervise. This solution although not perfect appeared the better alternative.

First Phase Evaluation Model

The Secretary of Capitalization required that the responses by the AFP consortia to the initial terms of reference questions be analyzed and evaluated in less than one week's time. A customized evaluation model was developed to analyze the responses that would enable the team to meet the stringent deadline, maintain an impeccable standard and permit a full, in-depth technical analysis of the bidders' relevant submitted experience.

The model, distributed to the bidders on a diskette, required them to respond in writing and on diskette. The model was then run analyzing the responses, preparing reports on a comparative basis, both by technical subject and by bidder, permitting a full evaluation with complete documentation of the responses to the objective criteria.

The model was multi-part, the first tier evaluated whether the bidding consortium met the minimum criteria requirements. The consortia/firms which qualified under the first tier of criteria were then subjected to the second tier where the model evaluated and analyzed the responses to the objective portion of the Request For Proposal (RFP) questions. The automation of the bidding response analysis process, as opposed to a manual review only by members of the sub-commission (made up of staff of Pensions, Capitalization and of the international strategic advisor), permitted a more accurate analysis of many subjects to be completed in an extremely short time period. The model then guided sub-commission members on the completion of the analysis and evaluation of the subjective criteria. Finally the model had a mechanism by which the objective and subjective evaluations were organized and joint reporting on each bidder was completed with full documentation of the scoring analysis.

Objective Criteria

The objective criteria used in the evaluation of the written responses of the bidders were focused on questions to which a response of yes or no could be made: a quantifiable response needed to be analyzed and compared. By requiring that the data input into the diskette be completed by the bidders and not the government evaluation team members, the labor and the data input integrity requirements were transferred from the government evaluation team members to the bidding firms/consortia. Thus the evaluation team not only was relieved of the obligation to reenter the data and verify its accuracy, they were also relieved of the tedious tasks of repeatedly calculating the same functions with different bidders. The evaluation team members' time was then directed to review the responses to the subjective questions.

Subjective Criteria: Analysis, Scoring

The subjective criteria were based on the responses to open ended questions which required that value judgments be made by evaluation team members. To ensure that the same criteria were used team members met in advance and agreed upon the difference between what would be regarded as high quality, mid-level or below an acceptable standard. The questions ranged from an explanation of how the investment policy would be followed, investment outlook and oversight to a description of the disaster recovery plan in the event of an emergency resulting in the shut down of the processing center of the record keeper. Once these standards had been agreed upon each evaluation team member reviewed each written response and awarded point ratings. Together with the points awarded on the objective criteria, the subjective totals were summed to generate an overall weighting and total.

The first intention was to select the top eight firms. A tie resulted between two firms for the number eight position which then expanded the list to the top nine. From a list of twelve bidders which presented written responses to the initial terms of reference, nine were selected as the pre-qualified firms, listed here in alphabetical order:

• Aetna Life Insurance Company, a US-based insurance company and pension plan administrator; JP Morgan, a US-based bank and asset manager; and Santa María, a Chilean AFP.

• Banco Bilbao Vizcaya, a Spanish bank.

- Citibank, a US and Bolivian based bank and pension administrator; and BISA, a Bolivian bank.

- Dresdner Bank, a German bank and asset manager; and Leiblesgessllschaft and Allianz, a German insurance company and pension administrator.

- Goldman Sachs Asset Management, a US and UK based asset manager; FAS Corp (Great-West Life subsidiary), a Canadian insurance company and pension administrator; and Banco Union, a Bolivian bank.

- Invesco, a US and UK based mutual fund and asset management firm; Argentaria a Spanish bank and pension administrator; Magister, a Chilean AFP.

- Morgan Stanley Asset Management, a US-based bank and asset manager; and Banco Santa Cruz, a Chilean bank and AFP.

- Swiss Bank Corporation/Brinson a Swiss and US asset management firm; and Aon Consulting, a US-based employee benefits and pension administrator.

- Templeton International, a US-based mutual fund company; Provida, a Chilean AFP; three Bolivian banks and one Bolivian insurance company.

One-on-One Meetings with Bidders

Prior to the issuance of the second set of Terms of reference, the Secretary of Capitalization organized one-on-one meetings with each of the pre-qualified bidders for the purpose of providing new updates and to solicit feedback from them on key technical issues. Comments from the pre-qualified bidders on the basis of their knowledge and experience, were taken into account in drafting the regulations, terms of reference and even in the Formulario development. The search for common ground on many issues began with the one-on-one meetings.

Prior to the meetings in La Paz in September 1996, the Draft Pension Law, sections of draft pension regulations, the proposed contract between the AFP and the government and revised plan specifications were distributed on the home page to the pre-qualified bidders. They were each asked to review the information (totaling over 500 pages to be read and analyzed prior to the one-on-one meetings) and to be prepared to discuss in detail the issues which they regarded as unresolved or problematic to them making a competitive economic bid in December 1996. (The economic bid presentation date was later moved to January 1997 as key issues were still being developed in December such as taxes, AFP commissions, bid bond requirements, guarantees required under the contract and other issues.)

The one-on-one meetings were generally regarded as very successful. Many of the bidders brought over a dozen members of their team which illustrated the significant financial and organizational commitment they had made and would continue to make.
Common issues the pre-qualified bidders raised were:

- The guarantee, or *fianza*, requirement proposed to be provided by the parent companies which would be the owners of the newly established AFPs once the bidding process was completed.

Originally the government maintained a position that it must have a joint and unlimited guarantee from all members of each consortium as part of the proposed contract language.

- Closure of the old system and topics related to transfer to the new system were raised. This included operational questions about how the data would be transferred from FOPEBA to the AFPs and when employers would begin to redirect the contributions; affiliation questions about how to communicate the revised amnesty program and how affiliation assignment would be made between the two AFPs; and benefit payment questions regarding which entity would pay the benefits of the current retirees and survivors under the *sistema de reparto* and how the transition of workers compensation would take place.

- The requirement, made necessary by the transfer of all active participants to the new system, that the AFPs buy Treasury bonds (TGN), as described later. The portfolio managers questioned whether this requirement would be the first of many requests to direct the flow of retirement and disability contributions into the control of the Treasury. The restricted portfolio diversification resulting from such limited investments and the quality rating conferred upon the bonds by international rating agencies were major concerns.

- Liquidity of the shares of the capitalized companies invested in the FCC for purposes of meeting the requirement to make the Bonosol payments.

- Expansion of the investment policy regulations. Both macro and micro policy issues were requested to be expanded. There were two groups that needed to meet in a middle ground: experienced portfolio managers who attempted to address aspects of the investment policy which they found to be unusual, irregular, conflicting with other sections of the regulations or incompatible with a policy of conservative, low risk volatility; and a group of government officials who had read a significant amount on investment policies and met with the Superintendent of Pensions from other Latin American countries who had advised them to be wary of scurrilous practices of potential AFPs. Issues included: methodology used to determine international limits, penalties, promotional costs of liquidating the shares of capitalized companies through public offerings

- Solvency of the *cuentas* of the FCC, workers compensation and death disability coverage.

2nd Terms of Reference: Economic Bids

The second terms of reference, governing the economic bid, were issued to eight firms. Since the distribution and response of the first terms of reference, Citibank had been identified as unable to continue its participation as a result of the clarification under the newly passed Pension Law on conflicts of interest with the AFPs. Citibank, through Cititrust Bahamas, had been awarded the contract as the custodian to the shares of the AFPs. The Pension Law conflict of interest policy restricted an AFP from also being the global custody agent to the AFPs for purposes of separation of duties and responsibilities for audit and control purposes.

The second terms of reference included the economic *Formulario*, of which earlier interim versions were developed and feedback sought from the prequalified bidders first at the one-on-one meetings and next through updates on the Internet. Accompanying the hard copy

Formulario was also the same input section but on a spreadsheet pre-loaded on a diskette for the AFPs to input their economic bids.

It had been decided that initially a single set of fees would be used identically by the two AFPs. Key factors which dictated the requirement of a uniform fee was that affiliates were pre-assigned and that transfers were not permitted during the program's initial years. The government was concerned that to permit fees to appear different to the affiliates, whether or not they actually were in final analysis, when the affiliates were restricted against transferring between the AFPs would appear unfair, require excessive communication support to explain and in the process not add any benefit. The fees charged by the AFPs are not subject to conformity past the five year exclusive period. The consistent fee application was essential to be able to pre-assign affiliates and to limit their transfers.

The process stipulated by the terms of reference was to accept the lowest (most competitively priced) bid as the number one bidder and the second lowest as the number two position. All other bids would be made public as well. The number two bidder would be given the opportunity to meet the price of number one; if declined the opportunity would be extended to the third placed price and fourth and so on. If one of the bidders agreed to lower its price to match identically the number one price, then the process would be completed. If none agreed, however, then the number one priced bidder would be required to change its price to conform identically to the next higher price to be equal to number two bidder. The process was complex and generated hours of questions, answers and debates. Ultimately, though, it did what it was created for: to generate extremely competitive prices regardless of the number of firms which presented an economic bid.

The *Formulario* addressed several concerns, such as the need to seek the most competitive economic bid for the Bolivian citizens; be accurate; be simple to complete, evaluate, and verify, as the bids would be opened and a decision made on live television; and preclude a deviation in the analysis process resulting from bids too high or too low corrupting the bidding process. A uniform fee of 0.50 percent of salary was hard coded in the *Formulario* as the amount that the employers had to collect in addition to the 10 percent of salary retirement contribution to facilitate the standardization of the fees and to facilitate the employers' collecting process. Bidders were free to set an asset management fee schedule stipulating different percentages for successive levels of assets and to set a benefit payment fee.

Pricing

The asset management fee quoted by the lowest bidder, the consortium Invesco/Argentaria/Magister, was 22 basis points on the first US $1 billion of assets under management, six basis points on the next US $500 million and no asset management fee assessed on asset managed above $ US 1.5 billion. Under the pre-set rules, the third lowest bidder could have jumped ahead by adopting this fee scale but the second lowest bidder preempted this move by exercising its first option to adopt the lowest bidder scale. This very low asset management fee reflects the fact that it applies on the total of FCC and FCI assets, thus the AFPs start with a substantial funds from the very beginning rather than having to suffer through the slow build up of contributions.

The decision that fees of both AFPs would be the same, the percentage of salary fee would be 0.50 percent of salary and paid at the time each contribution was collected led the bidding AFPs to make separate benefit payment fees zero as there would not be a high number of payments in initial years and they could improve their competitive position without significantly reducing revenues. The advantage of this fee schedule to the affiliates is that it permits them to have a more competitive fee in the program's early years. It is also more equitable in that it attributes most of the cost in proportion to the services, avoiding for instance that the contributors subsidize the non-contributors (when only a percentage of contribution fee is charged) or the longer term participants subsidize the new entrants (when only a percentage of asset fee is charged).

The average fee, in percentage of affiliates' salaries will vary with the average multiple of salaries that accumulated assets will represent and also with the overall volume of assets since in aggregate the asset management fee is limited to US $5 million in aggregate when each AFP has US $1.5 billion or more under administration.

Number of Economic Bids

There were criticisms immediately following the economic bidding process that the government had failed to obtain more than three economic bids. As the above description outlines, however, it is the process that defines the methodology and the market conditions which effect pricing, not the actual number of bids received as each bidder did not know how many others would present an economic bid until the day on which all bids were presented. Thus, the quantity of bids could not have altered, either to make more or less competitive, the final bids of the three firms.

When the issue was discussed with the other five firms which did not present an economic bid the reasons cited included: continued participation in such a complex bidding process was increasingly costly; the high percentage of TGN bonds in which the AFPs would be required to invest contributions would inhibit proper portfolio diversification; the inability of the government to reach equitable terms on the *fianza* issue with all pre-qualified bidders prior to 72 hours before the presentation of the bids; and failure of consortium members to agree on pricing.

Conclusions and Observations

One of the key differences between Bolivia and the systems previously adopted is the initial limitation on the number of AFPs to two, i.e., the minimum to preserve competition; the pre-assignment of affiliates by territory or date of birth; the determination of commissions by international solicitation rather than through ongoing competition between licensed AFPs; the five year exclusivity period; and the limitation on transfers after year 2000. This approach has drastically reduced the initial costs for the successful bidders and only time will tell if it will suffice to prevent a « transfer war » once the exclusivity period is over. It is hoped that competition will rather focus on performance and quality of service since a track record will be available.

The limitation was also meant to compensate for particular difficulties of the Bolivia market. It is ethnically more diverse with large rural areas where Spanish competes with local languages such as Quechua and Aymara; to be able to establish a good service network in the whole country, AFPs had to be given some compensating advantage in terms of market share.

The Capitalization program was a very positive factor in the equation. It offers to the AFPs the opportunity to contact a large number of Bolivianos with a very interesting entry: a check for an annuity benefit constituting a social dividend available to all who register with an AFP. More importantly, it endowed the AFPs with a large initial capital to administer instead of having to build up a critical mass through enrolling new affiliates and collecting contributions on a monthly basis. In addition, under the one system approach finally adopted, the AFPs were handed a large number of pre-existing contributors.

All these factors contributed to a very low fee basis. Until the assets under management reach US $2 billion, the asset management fee is 22 basis points to which only 0.5 percent of contributory earnings need be added since there is no payment or other fee. A simple calculation shows that after 10 years, assuming an affiliate account aggregates 100 percent of contributory earnings (10 x 10 percent plus interest), his aggregate fee will be 0.72 percent, much lower than in neighboring countries! When the assets under management exceed US $1.5 billion in each AFP, the asset management fee is frozen at US $5 million in aggregate, thus further decreasing the average fee. Without taking this maximum into account, percentage fees should vary between 0.5 percent, at the start, up to about 1.25 percent for an affiliate having accumulated 350 percent of his salary. To take into account custody fees, we have used 1 percent as a conservative average estimate. (See GRAPH B)

GRAPH B

Bolivia, partly owing to the existence of the Bonosol, has done away with the concept of a minimum state guaranteed benefit. Such minimum guarantees introduce a Defined Benefit entitlement, generally unfunded, in an otherwise fully funded defined contribution system; it opens the door to further involvement of the state and to the risk of creating new deficits as political pressure gradually expands what was meant to be a low inexpensive commitment.

Another feature that Bolivia has avoided is the concept of a *corrido*, or minimum/maximum returns. Each affiliate benefits from the full return on his account and bears the full risks in a clearly equitable and transparent manner. This may help in creating more direct competition between the AFPs in terms of performance.

All Bolivianos are in one system: armed forces, civil servants, police, judges, education professionals, everyone. This should contribute to a strong sense of fairness and solidarity. What's good for one is good for all. No special interest groups are exempted from the system and all share in cost or risk for the benefit of all participants. The fact that some groups could or could not maintain special programs offering additional benefits for additional contributions, does not depart from the solidarity principle.

The changes that were made in Bolivia resulted in a much more difficult transition. At the same time as the new system has to be launched, the old *Sistema de Reparto* has to be closed which has required the creation of the *Unidad de Recaudacion* and the *Unidad de Reordenimiento*. Records have to be pulled together quickly, eligibility and amount for *Compensacion de Cotizaciones* determined, arrears established and verified, etc. The challenge will be a major one but after some initial confusion, Bolivia will have a simpler more robust system, the envy of South America.

In addition to the usual benefits expected in terms of growth of capital markets, increase of national savings rate, reduction in the dependency ratio, etc., the combination of the Bonosol and of the increase in private savings accounts could create a major cultural change. For many Bolivians, the impact of over US $70 million from the Bonosol payments introduced into the economy each year and the impact of the growth in average individual account values will create individual wealth where there was no similar opportunity before. Instead of a population dependent on government hand-outs financed by ever higher taxes, Bolivia will comprise over a million of affiliates who, through the AFPs, will be owners of income generating assets that will provide them with independence and financial security in retirement.

BIBLIOGRAPHY

Feeney, Zary. "Bolivia: Capitalization *a la Boliviana*," in *1997 Yearbook of Privatization International*. Washington DC, February 1997.

Guérard, Yves and Glenn Jenkins. *Building Private Pensions Systems*. San Francisco (International Center for Economic Growth and the Harvard Institute for International Development: 1993).

James, Estelle. *Averting the Old Age Crisis*. Washington, DC (The World Bank:1994).

Mitchell, Oilivia S. "Exporting Chilean Social Security Reform." Council on Foreign Relations conference on the forthcoming pension crisis. New York, November 1996.

Shah, Hemant. "Toward Better Regulation of Private Pension Funds." A World Bank conference on social security and private pension reform. Miami, January 1997.

Villegas, Ricardo Mendez. Internal Documentation. Sanitago, Chile: CIEDESS.

Vittas, Dmitri and Augusto Iglesias. "The Rationale and Performance of Personal Pension Plans in Chile," Washington, DC (The World Bank.: 1992).

APPENDIX

END NOTES

[1]The authors were members of the team of the strategic consultant advising the Ministry regarding the capitalization process and the pension reform.

FINANCIAL REGULATION IN BOLIVIA:
WITH PARTICULAR REFERENCE TO THE PENSION LAW

by Betty F. Slade

> "...it is clear that a country that undertakes a Chilean-style reform must strive to improve substantially its regulatory establishment...however, reform can be started without having a sound regulatory structure already in place... two conditions are necessary ...commitment of strong political support for continued regulation... [and] a close fit between allowed investment instruments and those supplied safely by the local capital market."
>
> Diamond and Valdes-Prieto (1994, p. 309)

Introduction

Bolivia has accomplished the crucial first steps toward revamping its social insurance and social security system and insulating it from the political process[1] through passage of Pension Law No.1732 in November l996. This law and its accompanying regulations require all employees in a "labor relationship" as defined by Bolivian labor laws, including the military and police, to enter into a mandatory system which provides for retirement pensions, survivors' benefits, funeral expenses, and disability benefits for common and professional risks (workers compensation).[2] The legislation provides for equal treatment for all *affiliates* including self-employed persons who may join the system on a voluntary basis.[3] Retirement benefits are mainly based on the affiliates' contributions (so that the affiliates assume the investment risks) with lower and upper limits on eligible income, and with some choice as to the type of annuity at retirement or by survivors. There are disability and accidental death benefits. There is a separation of the compulsory scheme from the public health programs, a common practice in Latin America. Pension benefits were previously provided only at retirement ages of 50 for women and 55 for men. Under the new scheme, affiliates may retire and begin drawing benefits when they have enough accumulated funds to reach a 70 percent replacement rate, but at age 65 they can retire and begin drawing benefits at whatever level their accumulated funds allow, a practice not allowed in Chile until l988. Employers can make voluntary payments based on contracts on behalf of an affiliate ("voluntary deposits for social benefits") in order to increase the size of the pension benefit, akin to the World Bank's third pillar. (See World Bank (l994)). Unique to the Bolivian reform,[4] the Law requires the immediate liquidation of all existing pay-as-you-go schemes, which have mostly proven unsustainable and often insolvent, with the government taking over all assets and liabilities of existing schemes and committing to honor obligations in a way that conforms with the new regulations.[5] Those who meet certain conditions, near to retirement or already retired under the old systems, will continue to be eligible for benefits from their former pay-as-you-go system. Others must enter the new system and abide by its rules. Contributions to the retirement system are tax-free, while benefits are taxed. The Pension Law does not address the tax situation on any pension schemes outside the AFP management. In fact, the Law does not address whether private pension funds outside the affilate's accounts at the AFP are allowed.

The Law provides for individual accounts (or affiliate accounts) for each affiliate contributing for retirement, on the one hand, and for collective funds or pools for death and disability, the variable annuity account and the workers compensation account, on the other. These are under private sector management by entities known as AFPs[6] chosen under a transparent system of competitive bids. The number of AFPs has been initially limited to two, in comparison with Chile where 12 companies began operations in l981 and several more later. In Bolivia the AFPs are consortia of mainly foreign firms because of the strict requirements for qualification to bid. One selected AFP is headed by Invesco (US/British with 10 percent holding) in a consortium with Argentaria (Spanish with 57 percent), Magister Internacional (Chilean with 13 percent), and Sidesa (Bolivian with 16.5 percent). The other AFP is led by Banco Bilbao Vizcaya (Spanish with 67 percent) with BBV Pensiones, SA (with 33 percent). There are concerns that these two consortia may not compete, but rather will simply share the market, a point supported by the investment directives and exclusivity during the transition period. The hope is that the desire of these two consortia to enhance their reputation will cause them to operate efficiently in Bolivia; their relatively low fee structure has already been determined in the bidding process and their marketing costs should be minimal. However, it is expected that these consortia will suffer losses for their first few years of operation, as did Chilean AFPs. Capital requirements for Chilean AFPs vary by number of affilates, whereas in Bolivia it is a flat one million SDRs, much higher than the US $480,000 for a large AFP in Chile.

The Law has set up the framework for a pensions superintendency to oversee the performance of the system, as well as provide for a general superintendent who will coordinate the four separate financial sector regulatory agencies for insurance and reinsurance, securities market entities, banking and financial entities and pensions in a system known as SIREFI. The Law reinforces the prudential requirements for insurance companies and risk classification agencies which will deal in related pension business. It sets out in detail in a separate package in the form of a Supreme Decree signed by the President, the definitions, and regulations for operational control and investment portfolios of the AFPs, for conflict of interest, for the collective capitalization fund (Bonosol), and for the systems of professional and common risk insurance, retirement pensions, and death benefits. In addition, transition regulations explain the methods of transfer of the previously "insured" persons in the old stratified and diverse systems to the new system, including the methods of financing this transfer.

A special feature is that the government made a decision to transfer to the pension funds the state's resources from six large state-owned firms in what is dubbed as "capitalization".[7] For each firm, the state contributed 50 percent of its net worth to the formation of a new corporation with 50 percent participation from a strategic partner, chosen after a careful and transparent bidding process. The partner's contribution stayed in the company, increasing its value. The state's holding was deposited temporarily in a trust fund abroad operated by Cititrust to be turned over to the management of the AFPs for the benefit of Bolivians through their pension funds in April l997. This pool of funds is known as the Collective Capitalization Fund. Each year all Bolivians who are over 65 years of age receive a share of those funds as lifetime annuities, known as Bonosol, fixed for pre-defined payments, until all Bolivian citizens resident in Bolivia who were 21 years of age on December 31, l995 are dead. Funeral expenses for those not covered by the mandatory scheme are also paid set at Bs 1,100 (around US $200) with maintenance of value with the $US. The Bonosol for the first year is US $246 and is calculated by an actuarial formula which will be revised in 5 years and periodically thereafter. The Bonosol is akin to a minimum pension guarantee which is not means tested and which is financed by sale of the state's assets which are then privately invested rather than tax financed.

One very important potential influence on the effective operation of the social insurance and social security system is the Pensions Superintendency established by the new Pensions Law in Article 47 to "'guarantee' the payment of benefits, collection of contributions, as well as the security, solvency, liquidity, profitability and other activities related to the pension funds, the pension fund administrators and other entities foreseen by this law." This paper will analyze the provisions of the Pension Law and its supporting regulations relating to such regulation and supervision.

The Pensions Law also introduced a financial regulation system known as SIREFI or *Sistema de Regulacion Financiera*. Article 44 states that this system "is created with the aim of regulating, controlling and supervising the activities, persons and entities related to the long-term compulsory social security, banks and financial entities, insurance and reinsurance entities and the securities market within the scope of their competence." SIREFI provides a framework for overall financial sector regulation in Bolivia, but it could also have an important influence on the effectiveness of the regulation of the new social security system. This paper provides a detailed examination of this regulatory system as well as a look at selected other countries' regulatory institutional structures.

The paper begins with a brief discussion of some of the issues surrounding prudential regulation. It considers the reasons for prudential regulation, arguments for sectoral divisions of regulatory responsibilities, arguments for and against coordinated regulation, and the role of the legal framework in general. This discussion sets the stage for a review of the Bolivian legal and prudential regulatory situation at the time of the passage of the Pensions Law. Next, prudential regulation under the Pensions Law, including a look at those entities most closely associated with the Law's implementation, is addressed. Finally the paper examines the impact of the Pension Law on prudential regulation and supervision in general and on prudential regulation of compulsory long-term social security. Specific elements are examined more fully, including that of AFPs and their investment portfolios. Summary and conclusions end the paper.

Throughout, experiences of other countries will be cited for comparative purposes. It is clear that the earlier experiences have influenced the Bolivians to a great extent. However, it should be noted that the Bolivian experience to date reflects its own special conditions and political will and shall continue to do so.

Financial Sector Prudential Regulation

There has been on-going debate about the relative merits of prudential regulation, often addressing the issues in advanced industrial countries.[8] However, in the context of developing countries, there has been a growing recognition since the late l980s that liberalization without implementation of prudential regulation does not constitute financial reform, but rather a very risky strategy.[9] In particular, "soundness of banks" has become a key element of World Bank and IMF discussions and programs with developing countries, as a result of many poorly regulated banking systems entering into crisis.[10] Banking has been given so much emphasis because of its key role in the macrofinancial system and it is usually the first formal financial sector to become significant in a developing country. Regulation of other financial sectors is now being given more attention.

Why Regulate?

In the late l980s various experts suggested that the new risks from deregulation (liberalization) could be countered by appropriate supervisory action".[11] A conference held at Harvard University in June l990 emphasized prudential regulation: "New rules of the game have been made that govern operations of financial institutions and markets - from controls and restrictions to prudential and investor protection regulations."[12] In l991, Sundararajan and Balino stressed that sound prudential policies and their proper enforcement are critical for minimizing major disruptions to growth and stability.[13] In a conference on Sequencing of Financial Sector Reforms held at the Brookings Institution in October 1994 Ross Levine stated that prudential regulation is an integral part of financial reform and that financial regulations mold financial structure. David Cole suggested that prudential supervision is an important initial condition for a proper policy mix in financial reform.. Later Lindgren, Garcia and Saal (1996, p. 123) state: "Particularly in developing and transition economies, discipline in the form of official supervisory oversight is critical to compensate for failures in internal governance and discipline."

Herring and Litan (1995, pp. 49-50) suggest three broad reasons for regulation and supervision: preventing systemic risks and disruptions in financial markets, protection of consumers, and promoting various social objectives. When we speak of prudential regulation in this paper, we are referring to the first two broad reasons.

Two important characteristics of market-oriented financial systems as compared with government controlled systems are increased efficiency and increased risk of institutional failure. A main goal of prudential regulation is to lower the risk of institutional failure in order that the increased efficiency of the financial system can contribute to higher standards of living and stability. Herring and Littan (1995, p 60) state that "one key challenge for financial regulators is to find ways of making greater use of market forces to discipline financial institutions without at the same time exposing their economies to greater systemic risks." However, it is the very harsh discipline of the market (failed institutions) which provides the rationale for preventative regulation. Steil (1994, p.2, 5) states:

> the enormous developments in the markets over the past fifteen years or so have forced us to reevaluate fundamentally why it is we regulate and how we can do it effectively in a drastically altered environment.... Regulators in all major markets are struggling to adapt to these significant market developments.

How to Regulate?

Prudential regulation should meet specific goals. Gowland (l990, p.1) warns that, to a large extent, the pattern and form of regulation have been accidents of history rather than a reflection of some rational, coherent scheme and the regulatory legislation has been enacted in response to a crisis or scandal. He goes on to say (p.2): "Given the costs and difficulties inherent in regulating financial markets in the modern world, liberal and *dirigiste* should be able to agree that regulation should be designed to achieve specific, well-designed goals." White (1995, p.-8) divides regulation into three categories: economic regulation (the imposition of "must serve" requirements; prudential regulation (or safety and soundness), e.g., capital requirements or limits on risk, and information regulation, e.g., disclosure requirements. Using White's terminology, prudential regulation, or regulation for safety and soundness, is generally accepted as an integral component of financial reform for developing and transition economics, that is, liberalization is not seen as hands-off by government.[14] Government should maintain a role, either directly or through quasi-government or even private entities, to ensure fair and honest markets. On the other hand, strong efforts should be made not to utilize regulations to continue previous bureaucratic controls[15] nor to weaken market discipline. Market-based financial discipline should be allowed to operate to provide the correct signals and constraints. It is well-known that these maxims of behavior are difficult to implement in practice. As Lindgren, Garcia and Saal (l996, p. 123) put it: "To complement internal governance and market discipline, most countries initiate some form of official regulatory and supervisory oversight."[16]

Institutional Arrangements

There is a long tradition of regulation by central banks in Europe which were originally quasi-private bodies that were eventually absorbed by the public sectors. Other sectors were lightly or not at all regulated. In the US, chartered private institutions (The First and Second Banks) were replaced, after a long gap, by the Federal Reserve System which exists today along side other regulatory bodies for banks. In the US, regulation of insurance, pensions and even securities markets is carried out by a number of bodies, some overlapping, and with gaps, and not much is being done to change the systems.[17] It seems that to a large extent the existence of a supervisory agency depends on historical and political factors, or simply on pragmatism, rather than on planning. Countries with different institutional structures have been able to construct effective supervisory systems within their own structure.[18] More important factors than structure seem to be the quality and authority of the supervisors and the quality of the judicial systems.

Cooperation Among Regulators

Cooperation among prudential regulators can take different forms. It can either be formal or informal, depending on the circumstances of the particular country. Some possible goals of such cooperation are to prevent gaps in prudential authority, to clarify authority for regulation of functions that cross over traditional market classifications such as brokerage activities and investment fund management by banks, to prevent conflict of the various regulatory agencies, to obtain an overview of the effects of one sector's regulatory policies on another sector, and to enable regulators to be prepared to act together in a major crisis.

Pension regulatory agencies, when they existed, have most often been placed in the Ministry of Labor or some non-financial sector, and thus not treated as a "financial sector". This remains the pattern in most social security reforming countries. Cooperation among "financial sector agencies" thus does not often include the pension regulator.[19]

Regulators of different financial sectors have been drawing closer to each other at the international level more than at the national level.[20] It has been recognized that innovations and internationalization, although promoting competition, have also weakened or exposed the performance of some financial institutions and have exposed gaps in regulatory regimes. There are central issues in international cooperation such as what should be the rights of access for financial service firms in different countries, whose rules should apply and which nations or regulatory bodies should enforce those rules.[21]

Oversight Body

One suggestion to formalize cooperation among prudential regulators as well as to involve senior policymakers is to set up a high level oversight body consisting of top regulators and key policymakers which would review the issues and propose new regulations for the various financial sectors in a country.[22] The requirement that prudential regulators report matters to the Oversight Body could instill a discipline in their organizations that might not otherwise exist.

Some areas in which this body could have some form of oversight and review are: (1) promoting establishment of the appropriate legal bases for prudential regulations, (2) development of core regulations such as entry and exit criteria, capital standards, portfolio diversification standards, insider trading and manipulative prohibitions, types of supervision and enforcement ability, (3) definition and prioritization of the goals of prudential regulation by sector, (4) coordinating techniques of prudential regulation, (5) establishing comparative standards and conditions for regulators, and addressing issues of status and remuneration, (6) specifying standards for information to be released to the public, (7) drawing up *Crisis* plans, (7) approving standards and encouraging codes of ethics for operation in financial markets for market supporting institutions and professionals such as lawyers, appraisers, auditors and actuaries, (8) assisting in institution and capacity building in market-oriented systems and (9) maintaining surveillance over misuse of prudential regulatory authority.

There is however a risk that the system could be become overly bureaucratic, and heavily burdened by reporting and meetings.

Sectoral Divisions for Regulating Agencies

Prudential regulatory authority is often segmented according to type of institution, that is, there are separate authorities for banks, insurance entities, pension entities, and capital market institutions and professionals. This separation has generally developed because of historical circumstances where financial sectors have grown unevenly and governments have responded at different times to the regulatory needs by setting up separate regulatory agencies. Often prudential regulation of certain financial activities simply is neglected. Pension funds is one example in most countries, as reportedly it was in Bolivia. Often there are overlapping bodies doing the same kind of regulation, but for different subsets of institutions. An example is the complex system of overlapping bank regulation in the United States. In some cases, the banking system dominated the economy and as other financial sectors began to become significant the Central Bank took on responsibility for the other emerging sectors. Malaysia and Singapore are such examples of centralization.[23]

On the other hand, prudential goals for various institutions are often quite different and call for different regulatory emphasis. For example, banking regulators address liquidity, solvency and safety of the individual bank, and the policymakers worry about the potential of these banks to undermine the payments systems as a whole. Hence banking regulation tends to be more comprehensive. Generally insurance regulators have wanted to protect the public against false promises and fraud in the present which could undermine retirement benefits or ability to recover losses in the future. With the introduction of mandatory savings schemes managed by private entities, other facets of prudential regulation are introduced. In some cases, the regulation is simply to insure that financial institutions like venture capital companies meet the requirements under which they were constituted. As a result, some separation of authority has been recognized as efficient and has constituted the trend throughout the world.

Main Elements of Prudential Regulation

We interpret methods of prudential regulation in a broad way in this paragraph and try to define key elements. It should be emphasized here that prudential regulation should be within a strong legal framework, but also under guidelines that allow the market mechanism to work. One of the main obstacles to the proper functioning of the market mechanism is the problem of asymmetric information. That is, not everyone is equally informed so that one party has an advantage over another and can utilize that in a financial transaction. A first goal of regulatory agencies should be to ensure adequate, accurate and comparable information is available to the marketplace. A second goal would be define a basic set of core prudential regulations early on in the reform process along with incentives for the financial institution to maintain its own internal controls. Third, the institutional framework should be developed, that is the set-up of the regulatory authority with proper status, remuneration and enforcement authority for its officials. Fourth, the development of capacity to do off-site and on-site examinations of the entities involved. Finally, coordination, as discussed earlier, could help alleviate regulatory gaps, overlapping and conflicting regulatory rules, and other problems among regulators.

<u>Legal Framework</u>

An efficient market-oriented economic system relies to an important extent on the adequacy of the judicial system to provide a framework for just decisions in reasonable periods of time. The judicial system should provide confidence and efficiency through well-trained judges, prosecutors and lawyers. Such a judicial system is more often than not lacking in developing countries, and often overburdened in advanced industrial countries. Improvements in the judicial system are often critical to achieving an effective prudential regulatory system.

General laws such as the commercial code, company and bankruptcy laws, law on contracts and valuable papers, need to be passed or updated to meet the needs of modern commerce. However, these laws, other than in a few British-based ex-colonies, are generally not modern. In order to overcome this, special laws have been adopted which carry within them some of the necessary articles to make modern finance work, e.g., book-entry, trust and custodial relationships, special organizational structures, etc. In the finance area the laws are generally the Central Bank Law, Banking and Depository Institutions Law, Insurance Law, Securities Market Law, Social Insurance and Security Law, and Private Pensions Law.

Individual nations have diverse laws, but there have generally been two basic underlying codes: the civil or Napoleonic Code and the English Common Law or Commercial Law Codes.[24] The existence of the underlying code affects the types of problems that these countries face in modernizing their financial systems. Latin American countries follow the civil code, whereas the US follows the common law, and in Canada the Constitution allows for Civil Code application in Quebec whereas the rest of the country follows English legal tradition. Africa is divided as to original colonizer as is mainly the case in other parts of the developing world. It is often necessary to look at the total legal framework in order to understand the structure of the individual laws for the financial sectors.[25]

When prudential regulatory systems grow up under an inadequate legal framework and poor judicial processes, there is a tendency to try to build in corrective devices, that is, extra-legal measures which bypass the courts and even the law as it exists. The regulators argue that they need extra powers. Without clear legal directives and a check and balance from the legal process, prudential regulators find that on the one hand, they have a great deal of authority, but on the other they cannot rely on the legal system to support them in seizing assets or for a smooth liquidation process. This leads to intervention of political forces, rather than rule of law.

Legal and Regulatory Structure in Bolivia at the Adoption of the Pension Law

Bolivia is a civil code country with many old laws on its books. Despite various government plans to modernize the basic legal structure, and in particular the commercial legal system, the implementation has been delayed. The legal system is often pointed out as inadequate for modern business, both by foreigners and Bolivians. There is weak administrative law and no administrative courts, and therefore a good deal of administrative discretion must exist. Although some informal systems of enforcement exist because of close relationships in Bolivia, they are not adequate to a modern society. The judicial system has a reputation for slowness and corruption, although some strides have been made to improve it in recent years. Judges and other key actors in the judicial system are generally without expertise in the financial field. The independence of judges is often questioned and in reality there are only very few judges relative to the population size. Bankruptcy cases are rare, although there is a legal basis for them.

<u>Regulatory Agencies in Bolivia as of late l996</u>

Four separate regulatory agencies existed as of late l996 - the Superintendency for Banks and Financial Entities, the Superintendency for Insurance and Reinsurance Entities, the National Securities Commission for capital markets, and the National Institute for Pensions (INASEP).

The Superintendency for Banks and Financial Entities (SB) had been established in l987[26] as a separate organization from the Central Bank of Bolivia, where the regulatory function had earlier resided. It is by far the strongest of the three agencies because it is established under clear legal provisions and has supervisory power over the dominant financial sector in Bolivia. It is a public juridical entity, established for an indefinite period, with economic and administrative autonomy, under the *tuicion* of the Ministry of Finance. It receives its income from a fee equal to no more than .01 percent of the total assets of each entity in its jurisdiction, including the central bank.[27] The Superintendent has been selected for six years by the President from qualified candidates proposed by the Senate and could be reappointed and could be removed for causes consistent with Article 127(7) of the Nation's Constitution. Its functions, typical of bank supervisory agencies, are set out in the l989 decree cited above and in Articles 150-160 of the 1993 Law of Banking and Financial Entities. Article 153 makes the SB the "controlling organ" of the system of control of all mobilization of resources from the public and of financial interemediation of the country, including the Central Bank. Article 1 defines banks and non-bank entities in a very broad way so that all financial institutions might come under the authority of the Superintendent.[28] However, in effect, banks, housing finance institutions (*mutuales*), and activities such as warehouse receipts, housing loans, leasing, money exchangers, and credit activities of cooperatives tend to be included under its authority..[29]

The Statutes of the Superintendency of Insurance and Reinsurance (SIR) were approved by Ministerial Resolution No. 52 on January 29, l996, based on Article 181 of the Law (Decreto Ley) of Insurance Entities approved on June 2, l978.[30] This law covers private insurance activities. The superintendent was chosen in the same way as that of the Banking Superintendent. The SIR receives limited income from insurance entities, the state, and donations and is under the *tuicion* of the Ministry of Finance. The Superintendency regulates all private insurance and reinsurance activity in Bolivia in accordance with the Insurance Law and other relevant juridical norms.

The Statutes of the National Securities Commission were enacted into "law" in l979 under the authority of the somewhat revised 1978 Commercial Code. It was essentially given responsibility to draw up a law, a process that has been going on for some years, and to supervise the small stock exchange in La Paz. Without the law it has had little opportunity to address the issues of a modern capital market. On the other hand, there has been little interest on the part of the private corporate community to float equity or even debt. Activity on the market is mainly confined to government and bank debt instruments.

Social security arrangements were first legalized in Bolivia under the Social Security Code enacted in l956 and implemented by the Technical Council for Social Security under the Ministry of Labor. In March l973 the state body, the Bolivian Institute of Social Security (IBSS) was created; in June l977, the Ministry of Social Services and Public Health took responsibility. In l990 FOPEBA was created. On January 15, 1994 Supreme Decree 23716, under the authority of Articles 7(k) and 158 of the Constitution, dissolved the IBSS and established the National Institute of Insurance of Pensions (INASEP) and the National Pensions Secretariat which directed it. These were under the control of the Ministry of Finance and the Ministry of Human Development. At the time of the enactment of the Pensions Law, the system had become cumbersome, underfunded in most cases, and out of control with a large number of schemes with little prudential supervision. The government's potential obligations were growing rapidly.

The Pension Law aimed at consolidating obligations and rationalizing the long-term social security arrangements in Bolivia. It abolished INASEP. Article 55 called for liquidation of all entities engaged in social security arrangements previous to the Pension Law. The National Pensions Secretariat has been made responsible for the liquidation of all such management entities. The Pensions Superintendency has taken over full prudential responsibility.

Entities Related to The Pension Law

Chapter VIII of the new Pension Law has revolutionized the institutional structure of financial sector regulation in Bolivia. It also set up an overall regulatory system for social insurance and social security programs in Bolivia. We address first the new overall structure.

<u>Financial Regulation System (SIREFI)</u>

The 1994 Law for the Sectoral Regulation System (SIRESE)[31] served as a model for Chapter VIII of the Pensions Law in many ways. The Ministry of Capitalization, which oversaw the development of both laws, was impressed with the early period of the SIRESE system, and saw the safeguards in that system to be applicable to the financial sector prudential regulatory scheme.[32] The key elements in the SIREFI structure are four separate superintendencies which "regulate, control and supervise the activities, persons and entities" related to the areas under their competence. These four areas are: (a) banking and financial entities, (b) insurance and reinsurance, (c) securities markets, and (d) long-term compulsory social security (known in short as "pensions"). All are equal in status. Over all of these has been placed a General Superintendency. The SIREFI units are placed under the *tuicion* or guardianship of the Ministerio de Hacienda y Desarrollo Economico (known as the Ministry of Finance) as part of the Executive Power of the government.[33] The units of SIREFI are public juridical persons (ruled by the laws concerning their sector) with national jurisdiction and technical, administrative and economic autonomy consistent with their governing laws. SIREFI's general superintendency will be headed and represented by the general superintendent, and sectoral superintendents will head each unit. They all will be appointed by the President of the Republic from a list of three candidates proposed by two-thirds of the votes cast by the members present at the Senate Session. The general superintendent will be appointed for a period of 10 years, and sectoral superintendents for a period of 6 years, and none may be reelected until a term similar to his mandate, has elapsed. The general superintendent and sectoral superintendents must be Bolivian citizens, with a university diploma and 10 years of professional experience. They must not have conflict of interests, jail sentences within the last five years for fraudulent acts, been issued a final judgment in any penal proceedings, nor blood kinship or affinity, up to the second degree with the President or Vice-President or any sectoral superintendent. They can only be suspended for penal judgments, and dismissed under subparagraph f) of Article 118 of the Bolivia's Constitution or if there is blood relationship as described above. They must be full-time in their positions with only the right to teach at university level otherwise.

The activities of SIREFI's units will be financed through collection of fees and other resources as established in the respective unit's legal standards. An aliquot, or exact proportion, of earned income of the four superintendencies will be allocated to fund SIREFI's general superintendency. If necessary, during the first two years of SIREFI activities, the central government can allocate funds to cover the establishment and operation expenses of this system. SIREFI's budget proposals, on the other hand, will be submitted to the executive power through the Ministry of Finance to become part of the General Draft Budget of the Nation, subject to the norms of that budget, and submitted to legislative power for approval.

Appeals against the sector superintendents can be filed in accordance with the applicable procedural standards. If the sectoral superintendents deny revocation appeals, the aggrieved person can file with the general superintendent, thus exhausting the administrative procedure, and giving way to the jurisdictional contentious procedure, in adherence to the law. At that point, the issue goes to the district court and then the Supreme Court. Until resolved however, the provision remains in effect.[34]

The functions of the general superintendent include resolving legal problems of the superintendents, overseeing efficiency and effectiveness of the sectoral superintendent by helping out on specific issues, adopting administrative and disciplinary measures that might be needed, approving internal standards, salary and human resource policies, and budgets of each superintendent, presenting budgets to the executive power, and settling competence conflicts among superintendents. The sectoral superintendent applies the rules of the relevant law to his/her sector, fosters competition and investigates monopoly, monitors entities, etc. In general, the functions stated in Article 10 of the SIRESE Law apply, however no details have been worked out as to implementation. These details will be important to the effectiveness of the SIREFI system and core measures, at least, should be drawn up quickly.

Comparisons With Other Countries

A centralized, nationwide organizational structure like SIREFI for the regulation of the various financial sector sectors seems to be unique to Bolivia, among those countries that have undertaken pension reform on the Chilean model. In Chile the Superintendency, SAFP, is an autonomous agency linked to the Ministry of Labor and Social Security.[35] The regulatory capacity in Chile at the time of its l980 reform was poor. Prudential regulation for banking was only introduced in the same year. Securities and company laws were only passed the following year, after 5 years of deliberation.[36] In Argentina, pensions are regulated by the SAFJP, an autonomous agency linked to the Ministry of Labor and Social Security.[37] Pension regulation is not linked to overall financial sector regulation. In Colombia pension supervision was placed within the Superintendency of Banks.[38] In Eastern and Central Europe a variety of homes have been found for the pensions regulators, but not within an integrated regulatory system. Integration of regulation has been initiated in Australia and Canada, but is not all inclusive. Singapore, with its all powerful Monetary Authority, has all regulation within one agency with separate departments for the various sectors and probably is the closest to the Bolivian model.

Pensions Superintendency

The Pensions Superindendency is created and defined in Chapter IX of the Pensions Law as part of the SIREFI. It is given jurisdiction over persons, entities and activities of the long-term compulsory social security and "those entities that manage the benefits of capitalization." Its objectives are to guarantee the payment of benefits, the collection of contributions, the security, solvency, liquidity, profitability and other activities related to the pension funds, the Pension Fund Administrators (AFPs) and other entities foreseen by this law. The Superintendency will be financed by an annual regulation fee which must be deducted from the gross income of each APF or from entities that carry out activities subject to regulation.[39] Regulations will determine the fees for AFPs, which cannot exceed the higher of .05 percent of the total amount of the managed pension funds and 75 percent of their minimum capital of 1 million SDRs. Other entities (such as relevant insurance entities) will pay fees in conformity with the regulations, but there is no upper or lower limit specified in the Law. The functions of the Superintendency are extensive including licensing, supervising almost all activities of all entities engaged in the long term compulsory social security scheme, collecting information, ratifying classification categories for investment risks, monitoring and sanctioning anti-competitive behavior, authorizing distribution of assets from the collective capitalization funds among the AFPs, regulating the determination of the premia charged for death and disability and other payments for funding purposes, and proposing technical norms to the executive power and issuing judgments. The Superintendency will offer official expert testimony concerning relevant felonies. During a transition period the Superintendency shall set premiums on common and professional risks, contract medical doctors and other professionals to carry out risk classifications, and authorize use of the individual capital funds to meet negative balances. After Article 38 comes into effect, meaning that the capacity would exist in the insurance sector,[40] the

AFP will hire insurance companies to assume common and professional risks and private risk assessment agencies to calculate premiums.

Article 55 states that all existing management entities exclusively managing programs for old age, retirement, disability and death, professional risks and special insurance of Bolivian social security must be liquidated. Other entities, such as those that provide health insurance, cannot carry out any activities in connection with long-term mandatory social security. The National Pensions Insurance Institute will be abolished and its assets turned over to the Superintendency.

Private Voluntary Pension Programs Outside AFPs

There are no provisions in the Pension Law for the regulation of private voluntary pension programs outside the AFPs. In fact nothing is said about such programs. It is not clear whether they would be considered illegal or whether the tax regulations exempting premiums from tax would apply to these pension programs. There is a need to clarify this matter, and if such schemes are allowed, at least rudimentary rules should be set up immediately.

National Pensions Secretariat and Transition

The transition period is crucial as the old schemes will be abolished and the AFPs and the Pension Law implemented. It is a period when the National Pensions Secretariat will have the following major roles: (a) It will be in charge of liquidating the existing management entities and appointing receivers for the management entities under liquidation. (b) It will make a registry of pensions in process of payment under these old schemes and calculate the rate of compensation for contributions already made. (c) It will calculate pension benefits of eligible pay-as-you-go retirees. A Restructuring Unit and a Collection Unit under its *tuicion* sees to these tasks.

During the period of 5 years from the time the selected AFPs begin activities, they will have exclusive rights to manage the long term compulsory social security scheme at commissions already determined in their bidding process at the time of their selection. Affilates and Bonosol recipients will be assigned to them by the Pension Superintendent according to a prearranged formula.

Pension Fund Management - Interrelationships and Legal Status

Pension funds have no specific legal status[41] and simply are referred to as "resources" made up of the individual accounts and the collective capitalization accounts belonging to affiliates. The AFPs are corporations with one single social objective, in charge of the administration and "representation" of the pension funds, and constituted in conformity with the Pension Law and the Commercial Code.[42] The person incorporated ("*incorporado"*) into the long term compulsory social security system is called an affiliate. The long-term compulsory social security comprises benefits "in favor of" the affiliates. The objective of the Superintendency of Pensions is to guarantee the achievement of the activities related to the pensions funds, the AFPs and other entities foreseen in the Pension Law. It does not directly represent the affiliates[43], but does so indirectly in the law because affiliates have individual accounts as well as benefit individually from the capitalization process, in the form of the Solidarity Bonus or *Bonosol*. The Superintendency of Pensions has considerable authority over the AFPs and the insurance entities that will carry out pension-related activities. Affiliates seem to be able to contest resolutions by the Superintendent. (See Article 41 as it refers to Article 22 of the SIRESE Law.)

Insurance Entities

As of the end of l996, the plan to develop a new Insurance Law had not materialized and the existing Insurance Law was not seen as adequate to meet the regulatory needs of the long term compulsory social security system. Several articles were therefore introduced in the Pension Law which concern insurance entities. These articles cover life pension insurance or annuities (Article 17)[44], representation before insurance entities (Article 31 (e) and (o)), common risk and professional risk entities (Article 37), disability and death insurance coverage by insurance entities (Article 38), professional risk classification entities (Article 39), prohibition of patrimonial links (Article 43), set up of the Superintendency for Insurance and Reinsurance (Article 44), regulation of premia (Article 49), transition articles relevant to current activities of insurance and reinsurance companies (Chapter X), and deductions for ordinary health insurance (Article 66). The overlapping of competence for the insurance and pension regulators may have been one major incentive for the set-up of the general superintendency to "settle and resolve any competence conflicts that may arise among the sectoral superintendents."[45]

A key provision of the Pension Law is the responsibility of insurance companies (as well as the AFP) to set up annuities[46] and the right of affiliates of the AFPs to choose this form of retirement pension. Retirees with annuities from an insurance company or a guarantee of an annuity bear a risk that the insurance company may become insolvent.[47] Therefore, the strength and efficiency of the annuities market require sound insurance companies.[48] Insurance companies must be well-regulated by the Insurance Superintendent.[49] The pension regulations reinforce the requirements for the necessary qualifications of insurance entities dealing in social security-related businesses.

Securities Markets Law

Demand for new corporate sector instruments will be generated (eventually) from the new social security system for the investment portfolios of the pension funds, as has been the case in Chile.[50] However, because of the stringent investment criteria in the pension regulations, the capital markets must provide instruments that will meet these eligibility requirements. A transparent, well-regulated and active capital market will become necessary, particularly after the transition period. A major gap in the legal framework for such development is the lack of a securities market law, which was only submitted to the legislature in early February. Its passage is necessary to clarify the role of the Securities Market Superintendent as regulator, to set out the standards for public offerings, book entry, dematerialization, fungibility, and separation of assets, to provide the broad qualifications for capital market entities, including risk classification agencies,[51] clearing houses and stock exchanges, investment funds and investment fund managers and to adjust certain articles of the commercial code and civil procedure. A series of regulations in the form of Supreme Decrees is expected to follow this law. A Superintendent was selected in April.

The Chilean experience is interesting in that the company and securities markets law came after the pension reform. The Chileans did not allow investment in foreign securities despite the lack of a domestic market and instead limited investments to government and central bank debt and bank deposits (although there was also no bank supervision in effect in the year of the pension reform.) Thus the Bolivians, despite the gaps in the legal and regulatory framework, have a clearer framework than that of the Chileans at the time of their reform. The optimism posed by Diamond and Valdes-Prieto at the beginning of this paper must be tempered at this point with their warning that it is extremely important that the momentum for proper prudential regulation continue.[52]

Expected Impact of Pension Law on Regulation and Supervision

General Impact on Regulatory System Itself

As can be deduced from the discussion above, the enactment of the Pensions and Securities Market Law could have a major impact on the financial regulatory structure in Bolivia because (a) a complete structure of regulation is being put into place to avoid regulatory gaps, (b) a system of oversight and conflict resolution has been designed in the form of the General Superintendent, (c) regulatory superintendents are given equal standing and clear responsibilities, (d) funding is independent of the government but budgets are controlled by open hearings in the Legislature, (e) qualifications, appointment and dismissal processes are clear, (f) the lengthy waits in the legal process can be avoided in dispute resolution, and (g) once the Insurance and Capital Markets Laws are enacted, all activities will be grounded in law.

A General Superintendent of very high caliber, Mr. Jorge Patino Sarcinelli, has been selected, and it will be up to him to implement the SIREFI and the organization, staffing and implementing rules of the general superintendency. The General Superintendent must help make the public understand the new regulatory system and the very intricate Pension Law, so that the concepts involved will be understandable and acceptable to them.

Impact on Regulation of Compulsory Long-Term Social Security

The impact of pension law regulation can be far-reaching. There was no proper regulation before the law. Pension promises in many cases were not being met. Pension programs were either unfunded or poorly funded and many were bankrupt. There was corruption. State programs were headed toward distress as the number of working population was decreasing relative to the number of retired.

The new long-term compulsory social security scheme is designed to be fully funded as mainly defined contribution schemes.[53] Supervision of the AFPs, the main players in the new scheme, will be done by the Pension Superintendency under strict rules. The AFPs, on the other hand, have great incentives to achieve their goals and adhere to the regulations in order to enhance their reputations in Latin America (and elsewhere).[54] Their activities should be transparent if they report according to the requirements. In general the regulations are carefully drawn up and thorough.

Immediate problems facing Bolivia are the staffing and training of the pension superintendency, and its organization and initiation of operations. (A Pensions Superintendent, Mr. Guillermo Aponte, was only appointed in April, but he has the background and experience which bodes well for his tenure.) The transitional arrangements of moving from the old system to the new system, of getting everyone across the bridge to the 21st century of pension policy, will take much effort and time and may test the strength of resolve of the government. The success of the Pensions Superintendency will play a key role.

Specific Elements of the Regulation and Supervision

Introduction

There is compelling evidence that fully-funded, mandatory savings schemes, such as the one now being implemented in Bolivia, can improve long-term saving and even capital market development - some available research results show that "growth effects are positive and possibly large... mainly from increased national saving and financial market development.".[55] On the other hand, such schemes create public policy issues that must be addressed, namely, possible poor performance of these funds, need for assistance to very low-income employees and the fact that such schemes cannot provide adequate pensions in the early years of the scheme.[56] To address the first issue, the Bolivian authorities decided that a strong and very specific regulatory and supervision system was necessary for the pensions sector.[57] As discussed above, a Pensions Superintendency has been set up under the SIREFI system. Comprehensive and detailed regulations have been adopted and signed by the President in the form of a Supreme Decree. Many of these specific rules wisely reflect the experience in other pension reform processes, especially in Latin America. It is also important, however, that there are checks and balances, and some flexibility to meet emerging problems, so that the regulatory agency, does not end up "badly regulating" or "controlling" these funds in subtle ways. As in the Chilean model, regulation should continue to change to meet changing conditions.. See World Bank (1994), pp. 202-203.

Transition Period

There is a transition period in which rules are suspended or not activated or others are put into place temporarily in order to deal with the unique transitional problems. For example, the complete transfer of "insureds" from the old system to the new system is unique to Bolivia, and as such, an experiment. These transitional matters will affect the investment portfolio structure of the AFPs, as the Bolivian government requires AFPs to hold government bonds to finance the first few years of the transfer from the old systems to the new system.[58] The assignment of all affiliates to a particular AFP in a particular region and the requirement that the affiliate remain in that AFP are also temporary.[59] The time and efforts needed to get insurance companies and risk classification agencies operating in a correct manner also will be part of the transition. Finally, although the organization and staffing of the Pensions Superintendency is in process, it is still in the early stages. It will be some considerable time before an evaluation of "the regulations" can be made.

Specific Areas of Regulation

a. Pension Fund Administrators

The pension fund administrators (AFPs) play the key role in the long-term compulsory social security scheme under Chapter V, Article 27 as "responsible for the administration and granting of retirement pensions, disability and death benefits, funeral expenses and professional risk coverage ...as well as the management of the benefits of capitalization." They must meet explicit conditions and be chosen by public bidding. Their obligations are clearly stated in Article 31, among which are to treat all affiliates *without discrimination*;[60] to represent them and contract insurance entities on their behalf; to keep them informed of their accounts;[61] to deduct health premiums for them and their beneficiaries and hire the necessary health services for them in case of sickness or a professional accident; and to contract for services for determination of an affiliate's disability and the classification of the professional risk of his employer. In addition, the AFP must manage the investment portfolios, keep all records, and pay the pensions and *bonosol*. The AFP must keep its patrimony and records *separate* from those of the pension funds (they may not be commingled) and must report any change in shareholders' interests. Article 32 allows the AFP to receive a commission for administration of the portfolio as a deduction from the pension funds under its management, a commission for "affiliation, data processing and administration of benefits" shall be taken directly from the quotable income of the affiliate at time of contribution, a commission may be taken from each payment for pensions paid and for services and payments from the bonosol, and the AFP can deduct the cost of transactions and custody of the pensions funds from the pension funds. The percentage of the commissions is not stated, nor are there limits set on transactions and custody charges. The AFP will charge premiums to the affiliates for common risk and to the employers for professional risk insurance, set for no less than one year. In doing all this, the AFP must comply with the regulations under the law and avoid conflicts of interest and unfair competition in all of its acts.[62]

The key provisions as to the regulatory and supervisory authority of the Pensions Superintendency (PS) over the AFPs are: Article 28 whereby the PS gives the licenses to AFPs, Article 31(s) whereby all regulations by or contracts with the PS must be complied with, and Articles 34, 35 and 36 which gives the PS the right to intervene, revoke licenses and dissolve an AFP. Article 31 (p) requires that the AFP will pay a fee to the Pensions Superintendency for its support.[63]

Chilean experience with AFPs has been instructive in that failures have occurred, which have led to sales, liquidation, and mergers which the Superintendency had to oversee. A life insurance company which sold annuities went bankrupt in l984, which led to a strengthening of solvency regulations on life insurance companies.[64] It is clear that the Bolivians are relying on the reputation and good behavior of the winning AFPs not to fail, but also are strengthening their prudential regulations and setting up mechanisms to deal with failures in case they do happen.

b. Investment Portfolios of the Pension Funds

The administration of the investment portfolio of the AFPs is directly limited by the Pension Law and by the supporting Regulations: securities and financial markets must be "authorized" and limits are set. These stringent regulations follow the pattern set by Chile and others in their reforms.[65] Chapter VII of the Pension Law lays down general principles which can be interpreted as calling for diversification and safety above all.[66] It further calls for input by the Central Bank and two of the superintendencies as well as by "private risk classification entities established and authorized in conformity with the norms of the securities market" (Article 42). The Pensions Superintendency and the Superintendency of Securities set maximum limits in the Regulations as to generic type of instrument, per issuing entity, by category of levels of risk rating and by liquidity of the instrument (Article 41.) The Board of the Central Bank of Bolivia will authorize the limits for investments in securities of foreign issuers as between 10 percent and 50 percent of the AFP portfolio.[67] Finally private risk classification entities "shall classify securities and issuers according to their risk levels and categories".[68]

Article 40 suggests that the securities making up the portfolio must be registered, issued and transferred to the 'name' of the respective individual capitalization fund, by specifying the 'name' of the corresponding AFP."[69] At least 95percent of these securities must be deposited in an authorized custodian.[70] Finally, AFPs must place all the cash flow from the Collective Capitalization Fund into the individual capitalization fund that it manages.

In the transition period up to two years, the AFP must invest resources according to transitory rules outlined in special Regulations. Among these, the most important is that for five years, the AFPs must invest in newly-issued Bolivian government securities in order to finance pension payments which have been taken over by the Government of Bolivia from the liquidated schemes. This requirement implies that the contributions will be overwhelmingly invested in government bonds for the first few years of AFP operation and that the interest paid on these bonds will be the major source of income.

According to Mujica Riveros (1994, p. 141), the growth of investment resources in Chile greatly exceeded the growth of authorized financial assets, causing an increase in the assets' prices and a decline in the yield. He suggests that the regulatory framework must recognize the expected demand for such assets and promote efficiency in fund management by allowing for financial innovation and diversification, and avoiding portfolio concentration. After a few years the Bolivian AFPs will face this issue.

Although not included in the Pension Law, issues such as qualification of banks necessary for accepting pension fund deposits, the rules for making a public offering, the legality of book-entry accounts and dematerialization, and the like will influence the possible activities and earnings of the pension funds. The shallowness of Bolivia's capital market may lead the Central Bank to allow more investment abroad, but a balance needs to be struck in order to encourage the development of Bolivian financial instruments. Part of the challenge to the Bolivian authorities is to provide a proper legal and judicial framework for this development. There is also a challenge to Bolivian businesses to issue eligible debt and equity.

Summary and Conclusions

The Bolivian authorities have taken bold steps to reform their ailing social security system. In the course of this reform the entire financial sector regulatory system has been restructured. A general superintendent for financial regulation has been set-up, overseeing four equally ranked superintendencies for banking and financial entities, insurance and reinsurance, securities markets, and pensions. Conceptually, this is a viable system with an appropriate structure for the Bolivian situation. In practice, there is much to be done to ensure that its implementation allows for its effectiveness. There are important questions of organization, staffing and leadership that must be dealt with in the very near future. Fundamental to its success is the attitude of the regulators concerning their role, that is, whether they act bureaucratically with an attempt to control, or as prudential regulators. The Bolivians have adopted a prudential regulatory structure which does not appear elsewhere, and could be considered as experimental. In particular, their regulation of social security as "another financial sector" with ties to the Ministry of Finance, is unique. It could have very positive effects. The Bolivians also are attempting to develop their regulatory structure along with the development of the various financial sectors, rather than letting it lag far behind.

The new social security scheme in Bolivia has unique aspects which will in the long run probably serve the country well, but which in the short run may cause some difficult problems. Some unique features are the abolition of the entire complicated structure of existing pension schemes; the inclusion of normally privileged sectors, such as the military, police and civil service, allowing for, on the most part, a non-discriminatory system; the placement of the regulatory authority within a structure of other financial entity regulation, the appointment of a general superintendent to coordinate, and their "attachment" to the Ministry of Finance; the possibility that the investment of the pension funds may be done in foreign securities; and the Bonosol program which relies on sale of state assets turned over to the pension funds. The regulations concerning the pension sector are detailed and comprehensive.

In the next few years, the transitional issues will dominate the implementation of the social security programs, as the old system is abolished and the new system implemented. During this transitional and organizational period, the safety and soundness of the new system will be determined to a large extent by the behavior of the AFPs; their professionalism and maintenance of reputation are expected to be important factors leading to their proper behavior. The Bolivian authorities must complete their legal framework for the financial sector by adopting proper laws for the securities markets and the insurance sector. Two such laws are in preparation. These should give a stronger basis for the regulatory structure put into place by the Pensions Law. In addition, there is need to upgrade the judicial process and address the issues of modern business needs in the law and legal processes. However, the most important factor will be the will of future governments to carry the burden of the transition and to carry out the reform in full.

END NOTES

[1] "Because pensions...are paid by private companies, they have become largely insulated from the political process. The adoption of affiliates to this change has been slow, because few believed in l981 that pensions would stop being determined in the political arena." Diamond and Valdes-Prieto (1994), p. 283, in a discussion of Chilean experience.

[2] The Bolivians are the first to include all employees in such a reform. However it is likely that many "wage earners" in practice may not be included (for example, domestic servants and agricultural workers) for various reasons including the inability of the AFPs to detect and collect from the employer. See Mesa-Lago (1994), p. 23ff.

[3] Self-employed such as small farmers and traders, which make up a large proportion of this category, may be difficult to induce into the system in the early years, although it is hoped that the tax benefits and efficiency of the AFP will induce many.

[4] The Chilean reform allowed civilian employees under the old system to choose whether or not to switch to the new system, while the police and military remained strictly in the old system. Civilians could not be forced to move because of "constitutional protection of their property rights." (Diamond and Valdes-Prieto (1994), p. 275. The Bolivian reform is being challenged on constitutional grounds. Other social security reforms have left the old systems in place at least to some extent.

[5] In respect to the guarantee of acquired rights, Mesa Lago observed (1989, p. 248):"... this difficulty could be resolved by guaranteeing these rights to those who already enjoy them... or who have begun the process of retirement or will retire within a short transition period. But it is not possible to guarantee the entitlement rights of the previous systems to all of the insured, as doing so would destroy the objective of the reform, prolong the present system of inequality, and mortgage the future of the standardized system... The decrease in benefits levels should reflect the available resources and economic capacity of the country, and an effort should be made to avoid reducing benefit levels for the lower population group." It is clear though from Chilean experience that some will lose by the transfer and some will gain. There is concern by many in Bolivia that the distributional effects of the transfer are not transparent.

[6] See Diamond and Valdes-Prieto (1994), pp. 285-287. Also see Shah (1997) for a discussion against such specialized AFPs.

[7] Workers and ex-workers of these companies were first given rights to buy limited amounts of the state's shares which the vast majority did, but which on the whole did not amount to over 1-2% of the total amount of funds involved..

[8] See Grimes (1977); Gowland (1990); Chapter 1; Kopcke and Randall (1991); Wihlborg, Fratianni, and Willett (1991), Part V; Fair and Raymond, (1993), Part C; Patrick and Park (1994), pp.14-16; Steil (1994), Chapter 1; Zahid (1995a), Chapter 1; Herring and Litan (1995), Chapter 3; Lindgren, Garcia, and Saal (1996), Chapter 2, 9, 10. Gowland (1990, p 35) suggests that "the literature arose as a necessary corrective to a naive, starry-eyed view of regulation as a beneficent social desiderata... regulation is not a simple costless panacea...its application needs to be well designed and appropriate to the objectives it seeks to achieve."

[9] See Harwood and Smith (1997), Goldstein (1997) and Basle Committee on Banking Supervision (1997).

[10] See IMF Surveys (October 14, 28 and November 25, l996) and Goldstein (l997). It should be noted here that prudential regulation is not the only factor in promoting soundness of the banking system and perhaps not the most important in many cases.

[11] Fry (1988), p. 425; Hang-Sheng Cheng (l985), p. 12.

[12] Vittas (1992), p. 1.

[13] Sundarajan and Balino (1991).

[14] See Slade (1994).

[15] As stated by Cole and SladeYaser (1988), p. 56: "A supervisory and regulatory system oriented to asset quality and measures of liquidity and solvency must replace a system primarily concerned with following bureaucratic directives as to prices and credit allocation. All these changes not only take time, but also often require a change in leadership or, at least, in attitude of those directing key institutions."

[16] Caprio (l997) calls for more attention to factors that restrict banks' ability and willingness to diversify risk and giving owners, the market and supervisors more incentive and ability to monitor banks and ensure their prudent corporate governance. These suggestions also apply to other financial institutions.

[17] Kane (1988), p. 361 argues that duplicative regulatory functions and overlapping administrative boundaries that may seem inefficient from a purely static point of view provide dynamic opportunities for structural arbitrage...[that] disciplines poor regulators and rewards good ones." On the other hand, the Cross Report (l986) on international market regulation argues that it might be necessary to introduce single authorities with wide-ranging functions and powers. The Brady Commission to study the effects of Black Monday October 19, l987 recommended the unification of regulation of various markets under the auspices of the Federal Reserve in the US. See Gowland (1990), p. 9.

[18] Lingren, Garcia and Saal (1996), p.134 suggest that non-governmental or independent agencies make better supervisors.

[19] This exclusion seems to be the case even in the Report of the Working Party on Financial Stability in Emerging Market Economies (l997).

[20] See Steil (1994), Chapter 8 for a discussion on international securities market regulation; Herring and Littan (1995) and Coleman (1996) cover financial services in general; Lindgren, Garcia and Saal (1996) discuss international governance of banks in Chapter 11. Also see the Report of the Working Party on Financial Stability in Emerging Market Economies (l997).

[21] See Herring and Litan (1995), p. 3.

[22] Goldstein (l997) suggests oversight at an international level for banking.

[23] In recent years the Malaysian Central Bank divested some of those functions into other agencies. In Singapore, a city-state, the Monetary Authority of Singapore (MAS) oversees all financial sector regulation and is considered a very strong regulator.

[24] Some countries manage to have both at the same time, but not without a degree of conflict. One example is Mauritius.

[25] Islamic Law countries provide important examples.

[26] The General Law of Banks of l928 created the Superintendency of Banks. Supreme Decree 09428 of October 28, l970 gave "temporary" control of the activities of the Superintendency to the Central Bank of Bolivia. Supreme Decree 21660 of July 10, l987, reinstated the functions to

the Superintendency. Supreme Decree 22203 of May 26, l989 approved the Statutes of the Superintendency of Banks and Financial Entities.

[27] It does not receive economic support from the Treasury. It proposes a budget to the Ministry of Finance for inclusion in the general budget to be approved by the legislature and is audited by the Auditor General of the Republic.

[28] A financial entity is defined as a juridical person situated in the country whose social objective relates to the field of intermediation and financial services.

[29] Article 164 gave the SB "authority" over the insurance and reinsurance commission and the securities commission until their individual laws were passed, but this authority never seemed to have been used. The Pension Law had not been envisaged at the time of the banking legislation and there is no mention of pensions regulation.

[30] Known as Decree Law No. 15516 approved by the Council of Ministers.

[31] See Law No. 1600, October 28, l994.

[32] Personal Interview with a Ministry official.

[33] Note it is separated from the legislative power.

[34] The adequacy of the judicial system is important to the effectiveness of this procedure.

[35] Vittas and Iglesias (1992), p. 17. The Superintendent is appointed by the President of Chile and has considerable independence and authority. The Superintendency however is not linked to the other financial sector regulatory bodies as in Bolivia.

[36] Diamond and Valdes-Prieto (1994), p. 274-275.

[37] Vittas (1997a), p. 32.

[38] Queisser (1995), p. 31.

[39] Article 48 suggests the possibility that the Superintendency itself can receive "financial support from the Bolivian General Treasury."

[40] Capacity means that the Insurance and Reinsurance Superintendent determines that at least six insurance entities specialized in life insurance are capable of handling this business.

[41] In Chile, pension funds are separate legal entities from AFPs and they are owned by the affiliates.

[42] Although the AFP represents the pension funds it does not constitute a trust, a concept unacceptable to Bolivian law.

[43] No specific relationship with the affiliates is mentioned in the law.

[44] An affiliate (or his survivor) has choices for pension payments, but the initial choice is irrevocable, can be passed on to beneficiaries, and cannot be terminated until the death of the last beneficiary. There are guaranteed funeral expenses of BS1,100 with maintenance of value to the US $. *Life Pension Insurance*, a lifetime annuity, is purchased from a qualified insurance company which agrees to pay a life pension insurance and death benefits to the retiree or his/her beneficiaries. The other choice, *Monthly Life Payments*, a variable life annuity offered by the AFP, consists of monthly payments which may vary with the market value of the pool of funds (known as the *mensualidades vitalicias variables)* and the mortality index of the retirees in the pool. Both annuity options can be guaranteed for 5, 10 or 15 years by a qualified insurance company.

[45] SIRESE Law 1544, March 21, l994, Article 7 (i).

[46] Diamond and Valdes-Prieto (1994), p. 257 suggest that privatized annuities have higher administrative costs than a more traditional defined benefit social security system. Some of this is caused by high marketing costs, which may be alleviated by the role of the AFP in selecting insurance companies under competitive bidding and offering the products to the affiliates. An annuitant may choose an optional form which also gives a guarantee of a minimum number of payments but may reduce the amount payable.

[47] The Chilean Government guarantees a minimum annuity payment and stands ready to make up some part of losses due to the insolvency of an insurance company in a kind of "annuity insurance" somewhat akin to deposit insurance. There is no indication that the Bolivians are providing any such guarantee, but rather are putting emphasis on tight control of insurance entities through joint efforts by the Pensions and Insurance/Reinsurance Superintendencies, and through some oversight by the AFPs. Bolivian insurers must build up a stabilization fund to spread the burden in catastrophic events.

[48] In the early years, a major role for foreign and joint-venture insurance and reinsurance companies may be necessary for the proper development of this financial instrument.

[49] See discussion of annuities in Chile in Diamond and Valdes-Prieto (1994), pp. 290-297.

[50] Diamond and Valdes-Prieto (l994), p. 259 and James (1997).

[51] See Article 42. Note these are different from the professional risk classification entities that will be licensed by the Superintendency of Pensions.

[52] See Diamond and Valdes-Prieto (1994), pp. 274-275, 308-309.

[53] The transitional period in which the government will assume many of the obligations of the defunct schemes will pose large financial obligations on the government.

[54] The two AFPs have been given exclusive rights to operate in certain geographical areas over the next five years with affiliates being assigned to them. Only in exceptional cases can affiliates change to the other AFP. This will greatly reduce the costs involved in marketing that were seen in Chile at least in the first few years, and it is being said that this was an important reason for the low cost bids given by the winning AFPs.

[55] James (l997), p. 11. This article includes the bibliography for these studies.

[56] World Bank (1994), p. 202.

[57] The measures to alleviate poverty incorporated into the Bolivian scheme are discussed in other conference papers.

[58] The maximum investment of Chilean AFPs in government debt is 45% of the pension fund portfolio, but AFPs can investment in debt of banks and corporations that hold government debt. Diamond and Valdes-Prieto (l994), p. 281.

[59] There is some growing support for the assignment of affiliates based on the high cost of marketing experienced elsewhere.

[60] Since all employed persons, including the military, civil service, and other groups excluded in previous Latin American reforms, are included in the Bolivian reform, this is an extremely important provision. It will tend to unify and standardize the social security system providing the benefits thereof. Mesa-Lago (1989), pp.247-248, suggested that "unifying and standardizing...should simplify affiliation, individual accounts, collection of contributions, and the processing of benefits... eliminate duplication in coverage, and the lack of continuity among subsystems, thereby permitting the accumulation of work time in occupations covered by

different subsystems... cut administrative costs, reduce inequality, and facilitate transfers among groups (solidarity) and the progressive redistribution of income."

[61] Mujica Riveros (1994), p.141, suggests that Chile's failure to provide objective indicators of fund profitability and arbitrary delivery of information about past performance helped erode the transparency and competitiveness of the system, creating distorted incentives that affect the long-term profitability of the funds. He suggests that regulations are necessary to guarantee the delivery of information to affiliates in a proper and timely manner.

[62] Conflict of interest is stated as any act (by the AFP) related to the pensions system aimed at obtaining advantages or benefits for itself or third parties to the detriment of the interests of the affiliates of the pension funds and the pension funds themselves. Restrictions on activities with related parties, use of privileged information and certain contractual obligations are clearly stated and AFPs cannot receive any service at a prejudicial price.

[63] As discussed earlier, Chapter IX, Article 49, lists in detail the functions of the Pensions Superintendency and reinforces its authority to supervise, inspect and sanction AFPs.

[64] Diamond and Valdes-Prieto (1994), pp. 276-277.

[65] Investment in equities and in foreign securities were not allowed in the initial reform in Chile. Domestic equities were allowed in l985 and foreign investment effectively allowed only in late l992. Diamond and Valdes-Prieto (l994), p. 276.

[66] The two exceptions to the rules on safety and diversification are Bolivian treasury securities and securities of the Central Bank of Bolivia, which given the previous rule, means that the portfolios of the pension funds could be made up of 100% of either or both of the securities of these latter two issuers. Such securities in most countries are considered risk-free, but there is debate in some countries as to whether this should be the case.

[67] However, the AFPs are free to invest all funds in Bolivia.

[68] These entities will be licensed and supervised by the Superintendency for Securities Market which will be defined under the Securities Markets Law, still pending.

[69] This is probably as close to a "trust" relationship as one could come in this situation, except that the pension fund itself is not a legal entity, so the ownership must be vested in the AFP. The AFP will have to manage these funds very carefully so as not to commingle its "own" funds with it.

[70] We would assume that the securities are placed in custody in the name of the AFP. The Superintendency of Securities Markets will determine the standards for custody.END NOTES

BIBLIOGRAPHY

Alianza MNR-MRTKL, 1993. *El Plan De Todos*, May

Basle Committee on Banking Supervision. l997. *Core Principles for Effective Banking Supervision.* Mimeo. April.

Caprio, Gerard, Jr. (l997). "Safe and Sound Banking in Developing Countries: We're Not in Kansas Anymore." *Policy Research Working Paper*, no.1739. World Bank: Policy Research Department, March.

Cheng, Hang-Sheng. l986. *Financial Policy and Reform in Pacific Basin Countries*. Lexington: D.C. Heath and Company/Lexington Books.

Cole, David C. and Slade-Yaser, Betty F. 1988. Reform of Financial Systems, originally included in the HIID conference Systems Reform in Developing Countries, Marrakesh, Morocco, October l988. Later published in ed. Dwight H. Perkins and Michael Roemer. 1991 *Reforming Economic Systems in Developing Countries*. Cambridge, MA: Harvard University Press, l991.

Cole, David C. and Betty F. Slade. 1996. *Building a Modern Financial System: The Indonesian Experience.* Cambridge, England: Cambridge University Press.

Coleman, William D. 1996. *Financial Services, Globalization and Domestic Policy Change*, New York: St. Martin's Press, Inc.

Diamond, Peter and Salvador Valdes-Prieto. 1994. "Social Security Reforms" In Barry P. Bosworth, Rudiger Dornbusch, and Raul Laban, eds. *The Chilean Economy Policy Lessons and Challenges*, Washington, D.C.: The Brookings Institution.

Fair, Donald E. and Robert J. Raymond. 1993. *The New Europe: Evolving Economic and Financial Systems in East and West.* Dordrecht: Kluwer Academic Publishers.

Fox, Louise. l995. "Can Eastern Europe's Old-Age Crisis Be Fixed?", *Finance and Development,* December, 34-37.

Fry, Maxwell. l988. *Money, Interest and Banking in Economic Development*. Baltimore: Johns Hopkins Press.

Fundacion para Alternativas de Desarrollo (FADES). January 1996. *La Administracion Privada De Los Fondos De Pensiones: Perspectiva Desde El Sector Laboral*, La Paz: Instituto Latinoamericano de Investigaciones Sociales (ILDIS).

Goldstein, Morris. l997. *The Case for an International Gold Standard*. Washington:: Institute for International Economics.

Government of Bolivia. l996. *Project for Reform of the Insurance Entities Law*.

Government of Bolivia. l997. *Regulations for the Pension Law*.

Government of Bolivia. l996. *Project for the Securities Markets Law*.

Gowland, David. 1990. *The Regulation of Financial Markets in the l990s*. Brookfield, VT: Gower Publishing Company.

Graham, Carol. 1994. *Safety Nets, Politics and the Poor*. Washington, DC: The Brookings Institution.

Grimes, Arthur.1977. "Public Standards and Private Monitoring: New Zealand's New Banking Supervision Regime", *Agenda*, Volume 3, Number 3, l996, pages 277-286.

Herring, Richard J. and Robert E. Litan. 1995 *Financial Regulation in the Global Economy*. Washington, D.C.: The Brookings Institution.

International Monetary Fund. 1996. *Survey*, October 14, pp. 330, 336-339, 340-344

International Monetary Fund. 1996. *Survey*, October 28.

International Monetary Fund. 1996. *Survey*, November 25, pp. 377-383.

James, Estelle. l995. "Averting the Old-Age Crisis," *Finance and Development*, June, pp. 4-7.

James, Estelle and Robert Palacios. 1995. "Costs of Administering Public and Private Pension Plans," *Finance and Development*, June, pp. 12-15.

James, Estelle. 1996. *New Systems for Old Age Security -- Why, How and So What?* Paper prepared for EDI Conference on Pension Reform, November.

James, Estelle. 1997. *Pension Reform: Is There An Efficiency-Equity Trade-Off?* Paper prepared for Conference on Inequality Reducing Growth in Latin America's Market Economies, Inter-American Bank, January..

Kane, Edward J. l988. "How Market Forces Influence the Structure of Financial Regulation." In William S. Haraf and Rose Marie Kushmeider, eds., *Restructuring Banking and Financial Services in America,* Washington: American Enterprise Institute, pp. 343-382.

Kane, Edward J. l992. "Government Officials as a Source of Systemic Risk in International Financial Markets." In Franklin R. Edwards and Hugh T. Patrick, eds., *Regulating International Markets: Issues and Policies,* Boston: Kluwer Academic Publishers, pp. 257-265.

Kopcke, Richard W. and Richard E. Randall, eds. 1991. *The Financial Condition and Regulation of Insurance Companies.* Boston: The Federal Reserve Bank of Boston.

Lindgren, Carl-Johan, Gillian Garcia, and Matthew I. Saal. 1996. *Bank Soundness and Macroeconomic Policy.* Washington, D.C.: International Monetary Fund.

Mackenzie, G.A. l995. "Reforming Latin America's Old-Age Pension Systems," *Finance and Development*, March, pp. 10-13.

Mesa-Lago, Carmelo. 1994. *Changing Social Security in Latin America Toward Alleviating the Social Costs of Economic Reform*. Boulder and London: Lynne Rienner Publishers.

Mesa-Lago, Carmelo. 1989. *Ascent to Bankruptcy Financing Social Security in Latin America*. Pittsburgh, PA: University of Pittsburgh Press.

Report of the Working Pary on Financial Stability in Emerging Market Economies. l997. *Financial Stability in Emerging Market Economies: A Strategy for the Formulation, Adooption and Implementation of Sound Principles and Practices to Strengthen Financial Systems.* Mimeo, April.

Queisser, Monika. l995. "Chile and Beyond: The Second-Generation Pension Reforms in Latin America," *International Social Security Review*, Vol. 48, 3-4, l995, pp. 23-39.

Republic of Bolivia: *Pensions Law*, Number 1732, November 29, l996

Republic of Bolivia: *Central Bank of Bolivia Law*, Number 1670, October 31, l995

Republic of Bolivia: *Banking and Financial Entities Law*, Number 1488, April 14, l993

Republic of Bolivia: *SIRESE Law*, Number 1600, October 28, l994

Republic of Bolivia: *Capitalization Law*, Number 1544, March 21, l994

Republic of Bolivia, Ministry of Capitalization, *Capitalization*, l997

Mujica Riveros, Patricio. l994. "The Chilean Experience." In Francisco E. Barreto de Oliveira. *Social Security Systems in Latin America*. Washington, DC: Inter-American Development Bank.

Schwarz, Anita M. 1995. "Pension Schemes: Trade-Offs Between Redistribution and Saving," *Finance and Development*, June, pp. 8-11.

Shah, Hemant. 1997. *Towards Better Regulation of Private Pension Funds*. Conference of the Institute for International Research on Social Security and Private Pension Reform in Latin America, January 21.

Slade, Betty F. 1997. "Coordinating Prudential Regulations: A Multisector Approach." In Alison Harwood and Bruce L.R. Smith, eds, *Sequencing? Financial Strategies for Developing Countries,* Washington, D.C.: Brookings Institution Press, pp. 97-108.

Steil, Benn, ed. 1994. *International Financial Market Regulation,* Chichester: John Wiley and Sons.

Vittas, Dimitri. l997b. The Argentine Pension Reform and Its Relevance for Eastern Europe, draft.

Vittas, Dimitri and Augusto Iglesias. 1992. "The Rationale and Performance of Personal Pension Plans in Chile." *Policy Research Working Papers*, World Bank WPS 867, February.

Vittas, Dimitri, ed. 1992. *Financial Regulation: Changing the Rules of the Game.* Washington, D.C.: World Bank EDI Series.

White, Lawrence. 1995. "An Analytical Framework." In Shahid N. Zahid, ed. *Financial Sector Development in Asia.* Hong Kong: Oxford University Press, pp. 3-36.

Wihlborg, Clas, Michele Fratianni, and Thomas D. Willett, eds. 1991. *Financial Regulation and Monetary Arrangements After l992.* Amsterdam: North-Holland.

World Bank. 1994. *Averting the Old Age Crisis: Policy Options for a Graying World*, New York: Oxford University Press.

ASSESSING THE FEASIBILITY OF THE NEW BOLIVIAN PENSION PROGRAMS

by David C. Cole and J. Bernardo Requena Blanco

Introduction

The Bolivian Government has recently undertaken to implement a comprehensive, multi-faceted pension, social insurance, and social security program. While modeled in many ways on the pension reforms that have been implemented in Chile and other Latin American countries in recent years, the Bolivian program is both more drastic and more daring than those earlier programs. More drastic in that it provides for complete termination of all previous pension schemes (including those for the military and civil service), and absorbs their obligations into the new program. More daring in that Bolivia's economy, whether measured by per capita income, degree of urbanization or industrialization, or levels of economic and social infrastructure, is significantly less developed than those of its neighbors, and thus provides a less robust foundation upon which to build such a modern program.

The new pension program is compulsory for all "employed" persons and voluntary for self-employed persons. It is basically a defined contribution system, with contributions made primarily by the employee, and with no upper limits on the amount that can be accumulated in individual pension accounts that are administered by private Pension Fund Administrators (Administrador de Fondos de Pensiones, or AFPs). The government has terminated all previously existing pension schemes in Bolivia, and has committed to provide benefits to their participants over the coming decades. Thus, the Bolivian Government has assumed responsibility for much of the existing "implicit pension debt (IPD)" and set out formulae for paying those persons who were already participating in unfunded, pay-as-you-go programs whether they were already retired and receiving benefits or due to retire in the future.

The new social insurance programs cover disability and death benefits. Common disability insurance is compulsory for employed persons and for self-employed persons who elect to join the pension program. It is paid for by the insured. Professional disability insurance is only applicable to employees, and employers are required to pay the premiums for it. The social insurance programs will be contracted through the AFPs, but managed by a selected group of insurance companies.

The solidarity bonus, or Bonosol, provides for a uniform annual payment to all resident Bolivian citizens over the age of 64, and all resident citizens who were 21 years old or older, as of 31 December 1995, once they reach the age of 65. It also provides for a uniform benefit for funeral expenses for that same population. The Bonosol is to be funded by capitalization of the government's shares in six formerly state-owned enterprises, 50 percent of which have recently been sold to foreign investors. The Bonosol capitalization fund and the distribution of benefits are to be managed by the AFPs.

As indicated previously, these four programs - compulsory individual pensions for all employees, closing down and guaranteeing benefits of all existing pension schemes, standardized disability and accidental death insurance, and basic social security (Bonosol) for the whole adult population - are extremely ambitious in the current context of the Bolivian economy, and in comparison with other Latin American countries that have already carried out pension reforms.[1] The estimated population of Bolivia is 6.7 million, per capita Gross Domestic Product in 1995 was about US $900; some 300,000 currently employed persons are expected to be covered by the individual pensions and social insurance, some 3.4 million persons are estimated to be covered by Bonosol over the next 60 years. Furthermore, communication to many parts of the country is very limited or difficult; existing financial institutions that might be expected to handle collections of premiums and payments of benefits are largely concentrated in the major cities; the two AFPs that are to administer most aspects of these programs are newly established consortia with predominant foreign leadership and limited operational experience in Bolivia.

Theoretical Framework for Analyzing Pension Reforms

In recent years there has been a veritable explosion of new writings on pensions and social security systems. This has resulted from a growing awareness that many national social security programs, established in the heyday of social reform, were heading for crisis. Not only was this true in most of the developed countries that had led the way in establishing social security systems, but it was also the case in less developed countries, especially in Latin America and in former socialist states, that had undertaken similar commitments to provide income and social services for their elder citizens.[2]

The root causes of these problems were not too difficult to discern. A rapid change in demographic structure, due to declining birth rates and increasing longevity, was increasing the dependency ratio of the retired population relative to the producing population. Pension systems that promised defined benefits linked to rising wage scales, but funded on a pay-as-you-go basis, were either going to result in very heavy taxation of the working population or some form of benefit reduction for the elderly. Ultimately these pressures would lead to lower savings, lower investment and lower growth, which would further exacerbate the problems.

A major study by the World Bank (1994) proposed a three-pronged, or three pillar, solution to the old age crisis: a) a publicly administered, needs-based, tax-funded pillar to alleviate poverty, especially among the elderly; b) a privately administered, compulsory, defined contribution pension system for all employed persons; and c) a privately administered, voluntary savings system for employees and self-employed who wish to save more than the compulsory pension system requires. The first pillar is a defined benefit system that is intended to redistribute income from current income earners and wealthier consumers to the poorer segments of the society, particularly those elderly who are below the national poverty level. The second and third pillars are intended to encourage savings both to finance investment and growth, and also to fund future retirement through accrual of individual asset portfolios.

If this three pillar model can be seen as providing a sort of ideal, the most challenging problem facing most countries is how to make the transition from where they find themselves to something approximating this ideal, the "transition problem". This issue was addressed briefly in the World Bank study and has since been the focus of ongoing analyses by many writers.[3] There are several critical elements that need to be taken into account in deciding how to make the transition:

- What are the unfunded obligations of the existing pension commitments?
- How much of those obligations should be honored?
- By whom should they be honored?
- How should they be funded?

Then there are the issues for the future program that mainly revolve around the question of what combination of redistributive, compulsory and voluntary pension schemes is sustainable, equitable, and conducive to optimal economic growth. Clearly equitablility and optimal growth are political economy issues, but they need to be held up against the screen of sustainability to reach a realistic determination. Models that the World Bank and others have been developing are designed to shed light on these choices through simulations of various alternatives. The critical elements that are taken into account in one World Bank model[4] include:

- cash balance between inflow of savings or contributions and outflow of benefits;
- required contribution rate of compulsory contributions and taxes to meet social security obligations;
- the affordable replacement rate of pension benefits relative to income earned prior to retirement;
- the retirement age;
- the accumulated pension liability and implicit pension debt of past programs;
- the prospective return on pension fund investments;
- the implicit rate of return on lifetime contributions of pension fund investors.

An important factor accounting for much of the difference between the last two items is the administrative costs and charges of the entities responsible for administering the pension programs.

The choices that are made among these variables have implications for the macroeconomic outcomes such as the overall savings and investment rates, the stance of fiscal policy in terms of deficit or surplus, and ultimately the long term equilibrium growth rate of the economy. It would be desirable to apply this broad framework to the analysis of the Bolivian pension reforms, but the underlying data are too limited and the reforms are too recent to have any actual results.

We shall limit ourselves to trying to identify the main features of the programs that will be most likely to determine their ultimate sustainability. The concept of sustainability, in the context of defined benefit pension programs, is basically the same as solvency as determined by actuarial assessments. In the context of defined contribution programs, however, this equivalence breaks down because the accumulated contributions determine the benefits. Nevertheless, we believe that sustainability is a useful concept, which we define in terms of the potential for programs to continue to provide benefits at least comparable to those originally envisaged and provided for in the initial stages of the new programs. An example would be that the replacement rate for pensions should be sustainable at some targeted percentage of pre-retirement income.

Vittas (1997, p.157) has pointed out that many pension schemes set overly ambitious target replacement rates which then require excessively high rates of contributions to maintain sustainability. He suggests that a 30-40 percent replacement ratio is likely to be consistent with a 12 percent contribution rate. Guerard (1997) emphasizes that the replacement rate, and thus sustainability, is strongly influenced by the real rate of return on the investment accounts. He estimates that, under the conditions that might be expected to prevail in Bolivia, a 4 percent real rate of return would be consistent with a 36 percent replacement rate, while a 6 percent rate of return would result in a 62 percent replacement rate.

Given these cautionary indicators from both Vittas and Guerard, an important question that needs to be addressed in connection with the Bolivian pension program is what is a realistic, sustainable target replacement rate. A second aspect of the Bolivian pension programs to be considered is the various "safety valves" that are designed to protect their solvency, but not their sustainability. Finally it is worthwhile considering some of the major external, or exogenous, factors such as overall economic growth and stability, that will impact significantly on the ultimate sustainability and success of these ambitious ventures.

Main Features of the Proposed Programs

Individual Retirement Accounts

All employed individuals are required to contribute 10 percent of their monthly income to an individual retirement account.[5] Self-employed persons may join the pension system on a voluntary basis.[6] Employers are required to deduct the contribution from the employee's salary and pay it into the AFP with which the employee is registered. When an employee, or self-employed person (hereafter, an affiliate) has accumulated in his individual account an amount sufficient to fund an annuity equal to 70 percent of his base salary (i.e. his average earnings over the previous five years) plus death benefits for himself and his beneficiaries, he may begin drawing his pension, regardless of his age. When an affiliate reaches the age of 65, he is expected to begin drawing his pension. If the funds accumulated in his individual account are not sufficient to cover an annuity equal to 70 percent of the prevailing minimum wage, he will receive payments equal to 70 percent of the minimum wage until his individual account is exhausted. An affiliate may also continue accumulating funds in his individual retirement account and postpone retirement and the time when he begins receiving his pension. There is no upper limit on the replacement rate of the pension; it depends only on the amount contributed and the returns on his individual retirement account.

Pension benefits may be received either in the form of a specified annuity, purchased from an insurance company, or as variable monthly life payments paid by the AFP on the basis of its earnings from the pool of invested funds and its actuarial obligations. Specified beneficiaries also receive benefits after the pensioner's demise. A specified amount is also provided for the funeral costs for the pensioner.

Government Funding of Deficits of Previous Pension Programs

The Pension Law requires that, immediately upon its enactment on 29 November, 1996, all existing pension programs in Bolivia must cease further operations and proceed to liquidation. The Law provides further for the establishment of two new entities under the National Pensions Secretariat, a Restructuring Unit, and a Collection Unit. The Restructuring Unit is given the responsibility to take over the assets and the non-pension liabilities of the previous pension entities and see to their liquidation and settlement. The Collection Unit is responsible for collecting debts owed to the former pension funds and for paying the pensions of already retired persons who were covered by those previous pension funds.

The Pension Law commits the government to provide compensation for previous contributions to previous pension funds. This compensation will be based upon a formula including the number of years contributions were made and the final monthly salary from which contributions were made to the previous program. Compensation for these past contributions will be paid by the Collection Unit once the individual starts drawing his pension. Payment will be made directly to the pensioner if he is already drawing his pension, but subsequently as persons retire who are under an AFP program, the compensation will be paid through the AFP and combined with the individual's new pension. The compensations will be funded by issuance of government bonds which will carry maturities of 10-15 years. These bonds will be purchased by the AFPs using the new contributions coming into the individual retirement accounts. Thus, in a sense, the new contributions will go to pay pensions of those from the previous pension programs who are already retired or who will be retiring in the coming years - a kind of "pay as you go" system. But these bonds will carry market rates of interest and will eventually be redeemed by the government so they will constitute a legitimate and safe investment for the new pension funds. This procedure provides a mechanism whereby the government can meet a near-term obligation, to cover the deficits in the pre-existing pension schemes, but shift the burden forward to future taxpayers. The financial consequences of this operation are discussed in a later section.

Social Insurance Programs

The Pension Law also provides for disability, pension and death benefits for injuries either as a result of common risks or professional risks, for all persons who are covered under the compulsory pension system. Employees are required to pay the premiums for the common risk insurance, whereas employers must pay the professional risk premiums. The amount of the premium for the common risk insurance is initially set at 2 percent of the worker's salary (Article 298 of Regulations), but eventually it is to be determined by a public bidding process among the insurance companies that bid for this business. The bidding is to be arranged periodically by the AFPs and all employees will be subject to a uniform percentage rate. Similarly the premiums for the professional risk disability insurance are to be determined by bidding among the insurance companies, administered by the AFPs. This premium has been set temporarily, for the first year, at 2 percent of the worker's salary. The insurance companies, in turn, are required to enter into contracts with "health management entities" that will provide the medical services required to implement the various aspects of the professional risk disability programs.

Bonosol

The Bonosol is seen by the Bolivian Government as a way of distributing the benefits derived from the recent partial sale of the formerly state-owned enterprises among the current adult population of Bolivia. Alternatives that were considered included:

- Absorb the proceeds of the partial sales directly into the budget to permit some reduction in taxes or increase in government expenditures.
- Distribute part of the proceeds from the sales as cash payments to all the adult population.
- Distribute to all the adult population shares in mutual funds that would then hold the shares of the companies. Mutual fund shares could be redeemed by the holders as they wished.
- Deposit the shares in a Collective Capitalization Fund (CCF) that would be used to pay old age and death benefits to all the adult population.

The last option was chosen and is now being implemented. Payment of the benefits is to be spread out over the next sixty years, by which time practically all of the current population aged 21 or over can be expected to have died. The amount of the annual benefits for each person 65 or over is to be set initially for a period of five years, and thereafter reset every three years. Initially it is expected to be equal to approximately US $204. Subsequently the triennial determination will be based upon an actuarial calculation that will take into account the value of the shares in the CCF and the yield expected from them, the size, age distribution and life expectancy of the pool of prospective beneficiaries.

Valuation of the CCF portfolio is complicated. Initially it is based on the amount the foreign investors were willing to invest in, and thereby obtain one-half ownership of, the state-owned enterprise. The foreign investors were required to pay for their shares with cash, thereby increasing the capital of the enterprise that they would be managing by that amount. Valuation of the other 50 percent of the shares, that were then turned over to a custodian for subsequent transfer to the CCF, was based on the amount the foreign investors had been willing to pay for their shares. This valuation will remain in effect until at least 10 percent of the shares of any one issuer in the original CCF portfolio have been either placed privately or sold in the market, at which time the valuation of the shares of that issuer will be based upon the placement price or the latest market price.

A part of the CCF, approximately US $100 million, is to be set aside to cover funeral expenses. The remainder will be available to meet the annual old-age benefits. These funds will be divided between the two AFPs, and the amounts adjusted over time to give equal benefits to the total pool of recipients.

<u>Administration by Two AFPs</u>

The two AFPs that were selected by competitive bidding on January 23, 1997 are responsible for administering many aspects of the pension, social insurance and Bonosol programs. They are required to register all employed persons and set up individual retirement accounts for them. They are also required to select a group of insurance companies, through competitive bidding, to receive the insurance premiums (collected by the AFPs) and administer the disability insurance programs, and to monitor the performance of those insurance companies.

Finally, they are required to administer the Bonosol old-age and death benefits to a list of beneficiaries that will be provided to them by the government.[7]

On the asset management side, the AFPs are required to manage the CCF, which will likely entail selling some of the existing shares through private placement in Bolivia or abroad and arranging for the listing of the shares of the six enterprises in Bolivia and overseas. The AFPs are also required to manage the investment of the individual retirement accounts. Initially most of the available funds from this source will be invested in government bonds, that will be used to cover the insolvencies of the pre-existing pension and social insurance entities. Eventually, as the pension collections come to exceed the amounts required for the insolvencies, the AFPs will be expected to manage the investment of those resources in a more diversified manner.

The original two AFPs have exclusive rights to manage these several programs for 5 years, after which time it will be possible for others to enter the business, with approval from the Superintendent of Pensions.. The territory of Bolivia was divided into two zones, north and south, and each of the AFPs was given exclusive responsibility for one of the zones, again for 5 years. Both AFPs are authorized to operate in the four largest cities, La Paz, El Alto, Cochabamba and Santa Cruz. Individuals are assigned to specific AFPs depending on their location, but can shift from one to the other in time for certain reasons. These provisions were designed to try to minimize the marketing and administrative costs of the AFPs so that those costs would not absorb a disproportionate share of the ultimate benefits for the beneficiaries. Selection of the two final AFPs was based upon their managerial skills, their experience and their offering of the lowest charge for administering the programs. After the secret bids were announced and the lowest bidder determined, the second lowest bidder agreed to match the fee of the lowest bidder, so the administrative fees of the two AFPs will be the same for the next five years.

Sources and Amounts of Financing for the Several Programs

<u>Individual Contributions for the Individual Retirement Accounts</u>

One of the most important characteristics of the Bolivian reform is the change in the nature of the contributions. Under the previous pay-as-you-go system, the contributions from current income recipients were used to pay the pensioners, and this was viewed as a tax by the contributors. The new system of individual capitalization will allow the contributors to accumulate their own pension savings in their individual retirement accounts administered by the AFPs. Future pensions will depend not only on how much the individual has contributed, but also on developments in the domestic and international financial markets, and on how well the AFP will manage his or her investment portfolio. In 1996 the number of contributors under the previous pension programs was 343,000. It is estimated that this represented only 23.3 percent of the number of workers in urban areas, many of whom are self-employed and therefore were not able to participate in the former schemes. Contributions to the old system averaged 14.8 percent of wages, which included employers and government contributions.

Under the new system the total required contribution of the employee will be 12.5 percent of wages, with 10 percent going to the individual pension account, 2 percent for common risk insurance, and 0.5 percent as a fee to the AFP for administration. In addition, the employer must make a contribution for professional disability risk insurance. Initially this will be equal to 2 percent of the workers wages, but over time will be adjusted to reflect the relative risk of different types of work and the costs of actual coverage. Self-employed persons, who voluntarily join the pension system and establish an individual retirement account with an AFP, are then required to contribute 10 percent of their salary for the pension, 2 percent for common risk insurance and 0.5 percent for administration. They are not included under the professional disability insurance. Both employees and self-employed persons can voluntarily make additional contributions to their individual pension funds. Also, employers can make one-time or continuing contributions to employees' pension accounts, with the agreement of the employees.

All employers are required to register with the AFPs and to assist with the registration of their employees within specified time limits. Employers and employees that were covered under the previous pay-as-you-go schemes will be transferred more or less automatically to the new schemes. The degree of compliance and participation in the new programs, by those who were not enrolled in the old programs, is one of the major imponderables that will effect the future growth of the Individual Capitalization Fund (FCI). Others are the extent to which self-employed persons will join the new pension program, and whether many participants will choose to make additional contributions over and above the required percentages.

The pension regulations set limits on the quotable monthly incomes that are used in determining required contributions: the minimum income is the prevailing national minimum wage (currently Bs240 per month) and the maximum is 60 times the minimum wage. These limits do not appear to constrain the additional voluntary contributions of employees, employers, or self-employed persons. It remains to be seen whether the AFPs will be successful in providing sufficiently attractive investment vehicles that will be able to draw in these voluntary, supplementary contributions.

<u>Government Borrowing to Fund Deficits from Previous Pension Programs</u>

The implicit deficit of the previous pension programs will be taken over by the Bolivian Government as its responsibility. This deficit has two components. One is the obligation to meet current and future payments to persons already retired or to be retired, who were enrolled in the pre-existing pension programs. Since those programs were operating on a pay-as-you-go basis, and the inflow of payments has been stopped, there is a need to fund those obligations now and on into the future. The pre-existing pension funds had some assets which were not nearly sufficient to cover their pension liabilities. Those assets have been taken over by the government and will eventually be sold, but the proceeds will not go very far in meeting the pension obligations.

The second component involves the recognition of past contributions to the pay-as-you-go pension system by those persons who will henceforth be affiliated with the new pension program. The government is committed to provide a "compensation of contributions" made to the previous programs. This compensation will be paid when the participant in the former pension programs begins drawing his pension under the new pension programs. It will be provided on a monthly basis and channeled through the AFPs. The compensation of contributions, as set by the regulations, will be equal to 2.8 percent of their quotable salary as of October 1996 times the number of years in which they had made contributions in the previous pension systems.[8] A further restriction is that the quotable salary cannot be more than 20 times the minimum wage at that time.

Studies made by UDAPE and the National Secretariat of Pensions of the Ministry of Capitalization indicate that the present value, as of the end of 1996, of these implicit pension liabilities, covering the period 1997-2060, was US $1,938 million. Approximately two-thirds was attributable to the first component and one-third to the second.

The government plans to issue bonds to fund this deficit, thereby pushing the fiscal cost somewhat into the future. The bonds will have the following characteristics:

- Maturity: between 10 and 15 years.
- Rate of interest: fixed at 8 percent for the first year, afterward the rate will be adjusted to reflect the prime rate plus a premium reflecting country risk.
- Yearly payment of a fixed amount covering both interest and principal.
- Bonds callable at par.

During the initial five years, the AFPs are required to purchase all of these bonds, using the funds coming from the contributions of affiliates of the new pension program. The fiscal deficit arising from the need to cover these obligations will be approximately 3 percent of GDP in 1997, rise to perhaps 3.5 percent of GDP by 2010 and decline thereafter. New money coming into the individual pension funds in the next few years will probably be fully committed to purchase of these bonds but thereafter they can be increasingly channeled into other financial assets.[9] The AFPs will also be able to sell these bonds in both domestic and offshore markets, if they so choose. So long as the government continues to pay reasonable market rates of interest on these bonds, the participants in the new pension programs will not be forced to assume an inequitable share of the burden for funding the implicit deficit in the former programs. Instead the burden will be shifted forward to future taxpayers who will ultimately have to pay for the interest and principal on these bonds.

Employer Contributions for Professional Disability Insurance

Under the former pay-as-you-go pension system, employers contributed an amount equal to 4.5 percent of worker's salaries to the Fondo de Pensiones Basico (FOPEBA), and this included a contribution of 1.5 percent for professional risk. Under the new system, the employers' former contributions to FOPEBA are to be translated into automatic salary increases of 4.5 percent for all employees. In addition, the employers are required, during the first year, to pay a 2 percent contribution to cover professional risk. During the first year this professional risk responsibility will be handled directly through the Superintendency of Pensions. Thereafter, the AFPs will select insurance companies on the basis of a competitive bidding process, that will determine the level of contribution, and also the entities that will assume responsibility for management of the professional risk insurance system.

The Pension Law calls for establishment of risk-assessing agencies that will determine the relative riskiness of different types of employment and different firms. On the basis of these determinations, the level of premiums for professional risk insurance will be differentiated according to the degree of risk. Firms with high rates of worker accidents will be required to pay higher premiums. This is seen not only as a means of distributing the burden more equitably, but also as an incentive to firm management to try to reduce work-related accidents.

In the event of an accident arising from professional risk that results in disability, the insurance company will pay a pension commensurate with the degree of disability. This pension shall continue until the worker reaches the age of 65, at which time the funding of the pension shall shift to the individual's retirement account and the amount of the pension shall depend upon the amount of funds accumulated in that account. Prior to reaching the age of 65, the insurance company is required to pay both the disability pension and the contribution to the disabled person's individual retirement account. But the insurance company is freed of responsibility for further pension payments once the disabled worker reaches the normal retirement age.

Capitalization of State Enterprises to Fund Bonosol

As discussed previously, the Bonosol is to be funded by the proceeds of capitalization of six state-owned enterprises, known as the Fondo de Capitalizacion Colectiva, or FCC. The initial valuation of these shares, based upon the price that the successful foreign investors were willing to pay for acquisition of the other 50 percent of the shares of each enterprise, is approximately equal to US $1,700 million. After deducting US $100 million for the funding of funeral expenses for the beneficiaries, there will remain US $1,600 million to fund the future old age benefits for all registered persons over 65 for the next 60 years.

These shares will be managed by the AFPs and are expected to earn dividends and/or capital gains in future years. Also these shares can be sold by the AFPs and converted into other financial assets that meet the relatively conservative limits initially imposed on AFP investments. According to one set of estimates prepared by UDAPE and the National Secretariat of Pensions, assuming a steady rate of return of 7.62 percent, and a constant dollar value of benefit payments (US $246), over the next 60 years, the earnings from the Bonosol securities will exceed the benefit payments for the first three decades, thus increasing the total value of the Bonosol funds (FCC) by some 80 percent in constant dollars. Thereafter the FCC will decline until it is fully used up at the end of six decades. The maximum number of beneficiaries is estimated to reach a peak of some 1,380,000 persons in the year 2039 and diminish sharply thereafter. These estimates indicate further that the cumulative earnings on the FCC over the sixty year period will amount to some US $9 billion in constant dollars, or roughly 5.6 times the estimated value of the initial capitalization.

These are the parameters of a sustainable Bonosol operation over the next six decades. Obviously all of the assumptions as to initial valuation, rate of return, longevity and mortality are subject to change over time which could lead to either increases or decreases in the size of the annual individual benefits. Triennial actuarial recalculation of the feasible benefit level will determine which way it will have to be adjusted, but the adjustment cannot exceed 25 percent in either direction.

"Safety Valves" for Protecting against Insolvency

The most important feature of these several programs that will help to protect their solvency is that they are all essentially "defined contribution" rather than "defined benefit" programs. Although some have elements that make them sound like defined benefits, the benefits are in fact linked to the contributions which are the ultimate determinant of the benefits.

An example of this arises in connection with the individual retirement accounts. Frequent reference is made to the 70 percent ratio to final salary, which seems to suggest that the norm for pension benefits will be at this level. For example, once the amount accumulated in the individual's retirement account is sufficient to fund an annuity that would provide pension payments for life to the pensioner equal to 70 percent of his final salary, plus death benefits and payments to beneficiaries, the worker can retire, before the normal age of 65, and begin drawing his pension. Or, if a worker reaches the age of 65 and his accumulated retirement fund is not sufficient to fund an annuity that would pay benefits equal to 70 percent of the minimum wage, he can still retire and receive the 70 percent of minimum wage replacement pension, but only until his individual fund is exhausted, at which time the benefits terminate. A worker who retires at age 65 purchases the maximum annuity that his fund will cover regardless of whether it is sufficient to purchase a life annuity equal to 70 percent of his final salary. Thus, although the pension benefits are stated in terms of a percent of final salary, the variable element is the amount actually accumulated in the individual retirement account which then buys an annuity for whatever amount it can cover. Because the regulations provide that pension payments cannot fall below 70 percent of the then prevailing national minimum wage, this puts a floor on amount of monthly benefit payments in individual cases, but it then makes variable the period for which such payments will be made. Thus, even this minimum benefit payment provision is not likely to be a serious problem for the solvency of the AFPs.

A pensioner is given the choice, at the time of deciding to begin his pension, between two options, either a life annuity offered by an insurance company, or variable monthly life payments offered by an AFP. The later option provides for variable benefits linked to the mortality rate of the group of retirees and the profitability of the individual capitalization funds managed by the AFP. This is another form of flexible benefits. On the other hand, the insurance company that enters into contracts with pensioners to provide specified life annuities and death benefits is committed to meeting fixed long-term obligations, and these clearly pose the potential for insolvency. Insurance companies in Bolivia do not have good information on mortality rates of their prospective groups of annuitants, and they also face uncertainty as to their potential earnings, so that it will be difficult for them to price such annuities realistically. Inasmuch as the pension regulations stipulate that insurance companies will have to bid competitively among themselves and against the AFP, which will be offering a variable monthly life payment option, there is some danger that the insurance companies may underprice their annuities or, the same thing, promise unrealistic benefits from them. If, on the other hand, the annuities are conservatively priced and provide lower benefits, more pensioners will be induced to choose the variable life payments, which will reduce the solvency problem.

The system of compensation for previous pension programs, under the former pay-as-you-go procedures, involves specified payments over a number of years as well as considerable uncertainty as to the returns from liquidation of the former pension funds' assets. The payments are all obligations of the government that will be funded by issuance of government bonds. This may add to the fiscal deficits, but it does not appear to raise solvency issues for either the AFPs or the insurance companies. The maximum base salary on which the compensation is based was set at 20 times the minimum wage, as of October 1996, which was the date when the previous pension programs were terminated. Thus even if employees were earning a higher salary, and their employers had been making contributions based on that higher salary, the compensation for those past contributions that would be carried over into the new pension program, or to pay benefits to persons already retired, was constrained by this limit. This was one way in which the transition costs were curtailed.

The disability insurance programs will be the responsibility of the insurance companies. There is to be competitive bidding among the insurance companies in terms of the premiums charged for a defined set of benefits. Contracts of the AFPs with insurers can run for a minimum of three years and a maximum of six years, and can be renewed for an additional three years without competitive bidding if the Pension Superintendency agrees. Contracts with insurers can also be canceled by the AFPs for good cause. In their bids, the insurers must guarantee to maintain their proposed premiums for a minimum of two years. Thereafter they can request adjustments in the premiums, but must present evidence to justify the adjustment. Insurers are required to build up a positive "stabilization fund" that is to be used in meeting unexpected increases in claims and catastrophic emergencies, and also to be transferred to a new insurer upon the expiration of its contract. The Superintendency has the authority to determine whether an event qualifies as a catastrophe, in which case it will transfer portions of the stabilization fund from insurers that had lower claims to those that had higher claims relative to the total insurance coverage. This is a way of spreading the burden of catastrophic events, and will help to protect the solvency of individual insurers.

The Bonosol will have a defined benefit for the first five years, but thereafter the level of annual payments to persons over 65 will be adjusted every three years by the government to reflect an actuarial determination of the rate of payments that will meet all the expected obligations out of the remaining pool of assets. Thus the benefits over the years will be adjusted to live within the original contribution by the government of the shares derived from capitalization of the state-owned enterprises plus the accumulated earnings on that fund.

Practically all of the obligations under the several programs have a maintenance of value provision in terms of US dollars. This will undoubtedly encourage the AFPs to hold most of their assets under either the individual pension accounts or the Bonosol in dollar-denominated instruments. Since these are the predominant instruments in the Bolivian economy currently, there should not be a problem in staying fully invested in such instruments. Also, dollar instruments in Bolivia tend to carry somewhat higher returns than those in the international financial markets, so there will be some incentive to invest within the country rather than abroad.[10] Over time, however, as the pool of funds in the individual retirement accounts grows, there may be various pressures on the composition of these assets. There could be incentives to shift into Boliviano assets, if these yield significantly higher returns than dollar assets. Then if there are significant fluctuations in the exchange rate, some funds could experience losses.

Another source of potential risk involves the transition in the valuation of the Bonosol shares from their initial value, based on the price offered by the foreign investors who bought 50 percent of the shares of each enterprise, to a market value, once the shares are traded and listed. It is conceivable that the value of the shares could drop significantly for many reasons - poor performance of the company, labor or political unrest. This could lead to a reduction in the actuarially determined Bonosol benefits, which could cause public resentment. The government could then be under pressure to supplement the annual benefits in one form or another.

Major Factors That Will Affect the Sustainability of the Pension Programs

As we indicated at the beginning of this paper, the reforms embodied in the Bolivian Pension Law are both dramatic and drastic. Inevitably their degree of success will depend upon many factors, some of which are addressed in the Law and implementing regulations, and some which are outside the influence of this legislation. We have already discussed most of the points in the legislation that are designed to provide protection to the programs and to encourage the various entities responsible for managing different parts of the programs to operate in an efficient and equitable manner. In what follows we will mention briefly some of the important exogenous factors that will affect the outcomes.

The overall performance of the Bolivian economy in the coming decades will clearly influence the effectiveness of the pension programs, but also is likely to be influenced by the pension programs. If the pension programs succeed in raising the rate of national savings, and if these savings are efficiently channeled into domestic investments, this should have a bearing on the overall growth rate, improvements in real incomes and living standards, the rate of increase in employment in the modern sectors, and thus feedback into the growth of the pension system itself.

If wages and salaries come to equal as much as 50 percent of GDP, and if pension contributions are equal to 10 percent of wages and salaries, then the inflow of new contributions would tend to reach about 5 percent of GDP. These new contributions plus the income earned on accumulated contributions would constitute the annual gross savings reflected in the pension program. Against this would have to be offset the outflow of pension payments to those already retired, which would presumably be used mainly for consumption and thus reflect dissavings. It is not realistic at this time to try to make estimates of the potential increase in national savings that may derive from the Bolivian pension system.

The performance of the capitalized enterprises will have an important bearing on the growth of the FCC, and thus of the benefits that can be provided under the Bonosol. Also, the development of the financial markets, their efficiency, safety and soundness, will have an important bearing on the returns that will be realized on both the FCC and the FCI. This in turn will affect the levels of pensions and benefits that can be supported by these two Funds.

The ability of the government to service the debt arising from the deficits of the previous pension programs without resorting to inflationary financing, or holding down interest rates and forcing the bonds onto captive institutions, will have important implications for the healthy development of the financial system and its ability to mobilize and allocate financial resources efficiently. We have suggested that the cost to the budget of servicing this debt may rise to a level of about 2 percent of GDP by 2010, which probably means that the rest of the budget will need to run a surplus of the same magnitude to avoid inflationary pressures, or the diversion of national savings away from new productive investment.

Among the factors intrinsic to the pension programs that will be critical for their success, the most important will be the efficiency with which the AFPs are able to administer them. If the AFPs can hold their costs down, while still providing good services, this will mean that the affiliates can realize higher net returns from their savings. Not only will this benefit them directly, but it will encourage others to join the programs, and possibly also encourage a higher average rate of contributions. One of the serious dangers of these reforms, that was recognized early on, was that the administrative costs could absorb a significant share of the gross returns so that the net benefits would be reduced accordingly. Many of the features that have been built into the reforms have been designed to reduce the costs of administration and maintain both tight regulation and some degree of competition to promote efficiency and good performance. The initial bidding process for selection of the first two AFPs resulted in administrative fees that were well below what many had expected. There was a consensus among responsible officials, and the unsuccessful bidders, that these administrative fees would not be sufficient to cover costs, especially the start-up costs for the new programs. Thus, the AFPs are likely to experience losses for the first few years, which was also the case in the early years of the Chilean reforms.[11] The question remains as to whether these AFPs will be able to bring their costs down so that they can eventually realize a profit under the existing level of administrative fees, or whether they will propose and receive approval for higher levels of fees. Similar considerations apply to the disability insurance components of the new system. At this stage it is not possible to foresee how these competing forces of costs and benefits will play out, but they will ultimately have a critical impact on the overall success of the reforms.

The final question concerns the salary replacement rate that will be realistic and sustainable for the Bolivian pension system. The regulations seem to imply that a replacement rate of 70 percent should serve as a norm, and Bolivian authorities have generated scenarios that indicate this level of replacement is achievable under reasonable assumptions. The experience of other countries suggests that this may be an ambitious target. Factors that will have an important impact on the outcome include the rate of increase of real wages, the real returns on investments, the effective retirement age, and the life expectancy of retirees. As more information and experience become available on these key variables, it will be appropriate to reassess the reality of the expected replacement rate, and try to bring expectations into line with that reality, or possibly adjust other variables, such as the contribution rate, to achieve some desired replacement rate. Individuals will be able to adjust their contribution rates upward if they so desire. To move the whole pension system to some popularly desired replacement rate will call for broader adjustments.

Conclusion

The Bolivian Government has initiated an ambitious social security reform. Whether it will be able to meet the objectives and expectations of the designers of the reform will depend on many factors ranging from the overall performance of the Bolivian economy to the administrative efficiency of the agencies responsible for managing the programs. The various programs have a number of features that protect against insolvency, in that either the benefits are linked to the available financial resources, or the contribution rates can be adjusted to cover the realized costs of certain benefits such as the workers compensation insurance. Thus the ultimate effectiveness of the reform will emerge over time and will be measured in terms of whether the actual benefits conform to the original expectations, and also whether the rates of contribution have to be increased significantly to meet some of the defined or expected benefits.

END NOTES

[1]Carmelo Mesa-Lago (1994).

[2]Carmelo Mesa-Lago, *Ascent to Bankruptcy, Financing Social Security in Latin America*. 1989. (Pittsburgh, University of Pittsburgh Press), provided one of the early warnings for Latin America. He stated "Latin American history suggests that social security is like a staircase that leads to an abyss: as the coverage of risks and population rises, so does the financial disequilibrium that seems to end in crisis."

[3]See especially Salvador Valdes-Prieto, ed.. *The Economics of Pensions: Principles, Policies, and International Experience*. 1997. (New York: Cambridge University Press); and also the papers presented at the World Bank's Economic Development Institute workshop on "Pension Systems: From Crisis to Reform" held in Washington, November 21-22, 1996.

[4]See Kane and Zheng(1996).

[5]Contributions above 10% are permitted on a voluntary basis.

[6]Inasmuch as the only pensions that will receive favorable tax treatment are those under this official program, there is an incentive for self-employed persons who wish to accumulate funds for a pension to join this program.

[7]The register of Bonosol beneficiaries is being compiled by the government from a national registry (RUN) and from police registrations in the urban areas.

[8]This applies to persons who had made 180 contributions or more to the former system and who were older than 55 years for men and 50 years for women, as of 31 December, 1996.

[9]The Chilean Government consciously built up a fiscal surplus equal to about 5% of GDP prior to adoption of its pension reforms, for the explicit purpose of funding the implicit deficit of the existing pension programs. (Diamond and Valdes-Prieto, 1994). The Bolivian Government does not have such a fiscal surplus, but rather a small projected deficit of 0.2% of GDP in 1997, without taking account of the deficit related to the pension reform. Accordingly, the Government has chosen to push the funding of the implicit deficit off to the future, using bonds and current pension contributions to meet the near term cash requirements.

[10]Monika Queisser, "Chile and beyond: The second-generation pension reforms in Latin America". *International Social Security Review, Vol. 48. 3-4/95. p.28* reports that, although the maximum share of assets of the AFPs in Chile that could be invested abroad after 1988 was 10 per cent, the amount actually invested abroad was less that 1%. This she attributes to the relatively higher return on domestic assets relative to foreign assets.

[11]See Diamond and Valdes-Prieto, (1994, p. 285.)

BIBLIOGRAPHY

Bosworth, Barry P., Rudiger Dornbusch, and Raul Laban, eds. 1994 *The Chilean Economy Policy Lessons and Challenges*. Washington, DC: The Brookings Institution.

Cole, David C. and Betty F. Slade. 1996. *Building a Modern Financial System: The Indonesian Experience*. Cambridge, England: Cambridge University Press.

de Oliveira, Francisco E. Barreto. 1994. *Social Security Systems in Latin America*. Washington, DC: Inter-American Development Bank.

Demirguc-Kunt, Asli and Anita Schwarz. l996. "A Reform Proposal for Costa Rica's Pension System," *Finance and Development*, September, pp. 44-46.

Diamond, Peter, and Salvador Valdes-Prieto. 1994. “Social Security Reforms,” in Barry P. Bosworth, Rudiger Dornbusch, and Raul Laban, eds. 1994 *The Chilean Economy, Policy Lessons and Challenges*. Washington, DC: The Brookings Institution.

Fields, Gary S and Olivia S. Mitchell. 1984. *Retirement, Pensions and Social Security*. Cambridge, MA: The MIT Press.

Fox, Louise. l995. "Can Eastern Europe's Old-Age Crisis Be Fixed?", *Finance and Development,* December, 34-37.

Guerard, Yves. 1997. “Pension Reform in Latin America”. Presentation at the China Social Security Seminar, Beijing, April, 1997.

Haggard, Stephan, Chung H. Lee, and Sylvia Maxfield. 1993. *The Politics of Finance in Developing Countries.* Ithaca: Cornell University Press.

James, Estelle. l995. "Averting the Old-Age Crisis," *Finance and Development*, June, pp. 4-7.

James, Estelle and Robert Palacios. 1995. "Costs of Administering Public and Private Pension Plans," *Finance and Development*, June, pp. 12-15.

James, Estelle. 1996. *New Systems for Old Age Security -- Why, How and So What?* Paper prepared for EDI Conference on Pension Reform, November.

Mackenzie, G.A. l995. "Reforming Latin America's Old-Age Pension Systems," *Finance and Development,* March, pp. 10-13.

Mesa-Lago, Carmelo. 1989. *Ascent to Bankruptcy: Financing Social Security in Latin America*. Pittsburgh, PA: University of Pittsburgh Press.
Mesa-Lago, Carmelo. 1994. *Changing Social Security in Latin America Toward Alleviating the Social Costs of Economic Reform*. Boulder and London: Lynne Rienner Publishers.

Organization for Economic Co-operation and Development. l988. *Aging Populations The Social Policy Implications,* Paris: OECD.

Queisser, Monika. l995. "Chile and Beyond: The Second-Generation Pension Reforms in Latin America," *International Social Security Review*, Vol. 48, 3-4, l995, pp. 23-39.

Republic of Bolivia: *Pensions Law*, Number 1732, November 29, l996

Republic of Bolivia: *Pension Regulations*, January 1997.

Republic of Bolivia, Ministry of Capitalization, *Capitalization*, l997

Rojas-Suarez, Liliana and Steven R. Weisbrod. October 1995. *Financial Frailties in Latin America The l980s and l990s.* Washington, D.C.: International Monetary Fund.

Schwarz, Anita M. 1995. "Pension Schemes: Trade-Offs Between Redistribution and Saving," *Finance and Development*, June, pp. 8-11.

Valdes-Prieto, Salvador, ed.. 1997. *The Economics of Pensions: Principles, Policies, and International Experience*. New York: Cambridge University Press.

Vittas, Dimitri. l997a. Private Pension Funds in Argentina's New Integrated Pension System, draft.

Vittas, Dimitri. l997b. The Argentine Pension Reform and Its Relevance for Eastern Europe, draft.

Vittas, Dimitri, 1997c. “Social Security, Pension, and Insurance Reform in Developing Economies”, in Alison Harwood and Bruce Smith, eds. *Sequencing? Financial Strategies for Developing Countries*. Washington, Brookings Institution Press.

Vittas, Dimitri and Augusto Iglesias. 1992. "The Rationale and Performance of Personal Pension Plans in Chile." *Policy Research Working Papers*, World Bank WPS 867, February.

World Bank. 1994. *Averting the Old Age Crisis: Policy Options for a Graying World*, New York: Oxford University Press.