Social Security Privatization

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Abstract

The paper discusses the features of various social security privatization programs that have been introduced around the world in recent years with special reference to Chilean and British programs as they are often referred to as possible models for the U.S. social security reform. It then focuses on the current debate on the privatization of the U.S. social security system with a discussion on the relevance of Chilean and British systems.

I. Introduction

There has been and continues to be a growing interest in the world in a market-based model of social security delivery system to replace fully or partially the government run pay-as-you-go system. In the U.S, social security reform issue seems to get attention in every four years of Presidential election cycle and following the 2004 election, it has become, with a proposal for a partial privatization, a key policy issue for the second Bush administration. The some of the shortcomings of the government run systems are well known. They tend to become inefficient, less reliable, and in some cases, even discriminatory. The main problem in the government-run system is its dependency on the political process. Even in countries known for reasonably well-run system such as the United States, its sustainability as a pay-go system is threatened by economic and demographic shifts.

Groups interested in social security reform have been tracking the developments in the market-based system introduced in Chile and elsewhere in the world. In the U.S., proposals to reform the social security system have been afloat for many years. Proponents of reform believe, based on official reports and private studies, that the current U.S. system is bankrupt and cannot be sustained. Its ability to deliver promised benefits to future retirees is called into question. The U.S. president backed by many conservative groups supports some degree of privatization of pension benefits as a way to rescue the system from collapse. Supporters of privatization point out that many countries that have enacted reforms to allow workers to divert some of their contribution to private account have been successful and their programs have become popular (Social Security Reform Center, Dec 26. 2004). International organizations such as IMF have also been paying close attention to social security privatization programs, Chile’s privatization program in particular, and advising third world countries to introduce similar reforms.

The purpose of this paper is threefold. First, the paper will identify various types of social security privatization programs that have been introduced around the world in recent years and discuss their specific features. Second, it will discuss and evaluate social security systems of Chile and Britain in detail as they have been often referred to as possible models for the U.S. social security reform. Third, it will focus on the current on-going debate on the privatization of the U.S. social security system to save it from the allegedly bankrupt pay-as-you-go system.
paper will draw attention to possible consequences of any privatization (partial or full) on workers benefits, based on the experiences of privatized (funded) systems in Britain and Chile.

II. Models of Privatization

Since Chile introduced mandatory private saving system to replace the struggling pay-as-you-go social insurance system in 1981, many countries in the Latin America and other parts of the world moved to enact reforms to replace, partially or fully, their traditional pay-as-you-go systems with privatized systems. We are able to identify at least four types of privatization programs since the Chile introduced its program in 1981: (i) Social Insurance with Optional Private Accounts, (ii) Social Insurance with Mandatory Private Accounts, (iii) Mandatory Private Insurance System and (iv) Social Insurance with Mandatory Occupational Insurance System. Table 1-4 lists the countries and the type of privatization program they have adopted.

In the first type, countries reformed their existing pay-as-you-go system by giving workers option of directing part or all of their contribution to private accounts. This type can be described as partial privatization, as public insurance will continue to exist to provide for those who chose not to opt out of it. Countries included in the group are Argentina, and Britain. The two, however, differ in terms of contributions, eligibility and other details. In Argentina, workers were given a choice between the existing social insurance system and a private account along with a basic universal pension. In Britain, choice is between a privately funded system, operated by the employer or individual, and the existing state’s earning related pension system (SERPS).

In the second type, private accounts are mandated effective from certain date for the workers joining the labor force and the existing workers are given the choice for opting out of the old system. The existing pay-as-you-go system is targeted for eventual phasing out. This is the approach Chile adopted in 1981. This model has been embraced by many Latin American and East European countries since then.

The third type is the one where private insurance is mandated for every one in the work force. Bolivia and Nicaragua are among the few who have ventured into this type, where social security system is totally privatized. In Bolivia, all active members of the social insurance system were transferred to mandatory individual accounts in 1997. Contributions made under the old system will be recognized and paid as part of the pension. Nicaragua instituted the new individual mandatory system in 2004 to replace the existing social security insurance system.

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<thead>
<tr>
<th>Country</th>
<th>Type of Program</th>
<th>Year</th>
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<tbody>
<tr>
<td>Argentina</td>
<td>Social Insurance &amp; Individual Account System: Option to direct part of the contribution to private account.</td>
<td>1994</td>
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<tr>
<td>United Kingdom</td>
<td>Social Insurance, Social Assistance with Optional Private Accounts: A three-tier system: SERP’s benefits to be reduced gradually to encourage opting out.</td>
<td>1988</td>
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2. **Social Insurance System and Mandatory Private Account**

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<tr>
<th>Country</th>
<th>Types of Program</th>
<th>Year</th>
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<tbody>
<tr>
<td>Bulgaria</td>
<td>Dual Social Insurance System &amp; Mandatory Private Insurance</td>
<td>2002</td>
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<tr>
<td>Chile</td>
<td>Mandatory Private Insurance &amp; Social Insurance System: Social Insurance being phased out. Participation is mandatory for new workers and voluntary for old workers</td>
<td>1981</td>
</tr>
<tr>
<td>Columbia</td>
<td>Social Insurance and Private Insurance Systems</td>
<td>2003</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Social Insurance &amp; Mandatory Private Insurance: Private account introduced to supplement the social insurance</td>
<td>2000</td>
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<tr>
<td>Croatia</td>
<td>Dual Social Insurance System and Mandatory Private Insurance: Two pillar system</td>
<td>1999</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Mandatory Private Insurance and Social Assistance System: Old System is being phased out.</td>
<td>2003</td>
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<tr>
<td>Hungary</td>
<td>Social Insurance and Private Insurance System: Choice between Social system and mix of social and private is available</td>
<td>1998</td>
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<tr>
<td>Latvia</td>
<td>Dual Social Insurance System and Mandatory Individual Account: Two pillar system</td>
<td>2001</td>
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<tr>
<td>Kazakhstan</td>
<td>Dual Mandatory Individual Account &amp; Social Assistance System:</td>
<td>2002</td>
</tr>
<tr>
<td>Mexico</td>
<td>Social Insurance &amp; Mandatory Private Insurance Systems. All workers must participate in the new system. Social Insurance is being phased out.</td>
<td>1997</td>
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<tr>
<td>Poland</td>
<td>Dual Social Insurance System and Mandatory Private Insurance: Two pillar system</td>
<td>1999</td>
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3. **Mandatory Private Insurance System:**

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<tr>
<th>Country</th>
<th>Types of Program</th>
<th>Year</th>
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<tr>
<td>Bolivia</td>
<td>Mandatory Private Insurance System</td>
<td>1997</td>
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<tr>
<td>Nicaragua</td>
<td>Individual Mandatory System</td>
<td>2004</td>
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4. **Social Insurance and Mandatory Occupational Insurance Systems**

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<tr>
<th>Country</th>
<th>Types of Program</th>
<th>Year</th>
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<tr>
<td>Australia</td>
<td>Dual Social Security and Mandatory Occupational Pension</td>
<td>1999</td>
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<tr>
<td>Bermuda</td>
<td>Social Insurance, Social Assistance and Mandatory Occupational System</td>
<td>1998</td>
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<tr>
<td>Leichtenstein</td>
<td>Universal System and Mandatory Occupational Pensions</td>
<td>1987</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Universal Old Age Pension, Means-tested Social Assistance with Mandatory Occupational Individual Account (Private)</td>
<td>1995</td>
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<tr>
<td>Swizterland</td>
<td>Social Insurance &amp; Mandatory Occupational Pension System</td>
<td>1982</td>
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The fourth type is a combination of traditional social insurance with mandatory occupational insurance system. Countries adopting this approach include Australia, Bermuda, Liechtenstein, Hong Kong, and Switzerland. In early 1990s, Australia mandated employer-funded private pension funds for employees. Prior to that, Australia had only a means-tested pension system entirely financed with general revenue. The systems in Hong Kong and Switzerland combine the basic public pension with mandatory occupational pension, as done under the Australian system.

III. Chile’s Privatized Mandatory Savings System

The social security reforms introduced in 1981 were designed to establish a privatized mandatory savings system along with a government operated assistance and minimum pension system to deliver social security benefits. At the first level, the benefit delivery is made from a privately-managed defined contribution pension plan, and, at the second level, the delivery is made from a government guaranteed plan to those whose private pension accumulations are inadequate (minimum benefits) and to the elderly and poor who do not qualify for another pension (assistance benefits). The system’s redistributive aspect is reflected in the second level of benefit delivery.

Under the privatized mandatory savings system, workers entering the labor force after Dec 31, 1982 are required to join the new system and the existing members of the work force had the option of staying in the old system. The new system requires the workers to deposit 10% of their covered wages into an individual retirement account at an approved AFP (Administradora de Fondos de Pensiones) of their choice. The accumulation in the account is used to pay for his/her retirement pension. On reaching the retirement age (65 years for men and 60 years for women), the worker can use the accumulation to obtain an indexed annuity sold by an insurance company or set up a programmed withdrawal plan. Issuing indexed annuity did not pose any problem for Chile as it had a long history of dealing with indexed debt. The contributions of workers and the investments of the AFPs are free of taxes. Withdrawals upon retirement are taxed at a lower rate.

AFPs also provide disability and survivor insurance coverage to its account holders through private insurance companies. Workers have to pay for this by an additional contribution of 3% of the salary. Another 7% of the salary is withheld to finance medical insurance under the new system.

The annuity option of the system guarantees a constant monthly income for life, indexed to inflation. Workers are allowed to withdraw at retirement any excess of what is needed to fund basic benefits and use it for any purpose. The savings level of the system is designed to finance a pension that will provide 70% of average salary over the last 10 years plus disability and survivor’s benefits equal to 50% of the retirement pension.

One of the features of the new system that made it attractive and caused a massive switch to the system by workers below the age of 45 years was the lowering of the contribution rate. Those who chose to remain in the old system did not receive any cut in the contribution rate. To protect the interest of the workers, AFPs are subjected to strict state regulations with regard to the
number funds each one can manage, allocation of returns, portfolio composition and management fees.

Under the new system, individual savings for retirement at AFPs outside the mandatory savings system was also encouraged through incentive schemes consisting of special tax treatments. If the voluntary savings are long-term, their withdrawals are limited to pensions. If they are short-term AFP are available for withdrawal, but the tax treatment is different from that of long-term savings.

If accumulated funds through contribution for at least 20 years fall short of providing a minimum pension benefit (about 75% of the minimum wages), the government guarantees minimum pension using funds from general revenue.

Many changes have been made to the new system since its inception to address such issues as portfolio composition, early retirement, disability and survivor insurance, indexing minimum pension, annuity fees and multiple funds.

Evaluation of Chile’s New System

The mandatory system introduced in Chile in 1981 and in other Latin American countries since then answers the problem of intergenerational conflict originating from the labor demographics that the conventional unfunded pay-as-you-go social securities systems have been faced with. Under the privatized mandatory system, the working population does not have to subsidize the retiring population. Letting the funds to accumulate in the name of the employee also makes the system portable. The workers acquire a direct stake in the economy as they become the investors. The benefit payments are freed from the political process and the uncertainty that goes with it. It replaced a system in Chile that was essentially discriminatory and unfair as some powerful group could retire their members with nearly full benefits after as few as 25 years of work.

While the advantages mentioned above are typical of any privatization, the main problems of privatization Chile had to contend with include high cost of transition, high cost of benefit delivery, vulnerability to market risk, adverse impact on low-income workers and women.

Funds must be found to (1) meet the benefits payments to the existing retirees in the face of declining contribution and (2) pay those who join the new system for their past contribution, which Chile handled by issuing recognition bonds. Chile funded these from five sources: (1) cut in public spending (2) raising taxes (introduced a value-added tax in 1975), (3) reducing life-time benefits (raised retirement age), (4) selling government assets (sale of state-owned enterprises, (5) issuing debt (these bonds were sold to AFPs). Analyst estimate that by 2050 there will be no beneficiary in the old system. (Idemoto, 2000)

The Chilean system has been frequently criticized for its high cost of benefit delivery. These costs include those of the AFPs and those of the insurance companies that sell disability insurance, life insurance, and annuities. Valdes-Prieto (1994) estimated that the average administrative cost per participant while active is US$89.10 per year in 1991, which is 2.94
percent of average taxable income and 20 percent of the roughly 13.5% paid for the program. Substantial portion of the administrative cost goes to marketing. AFPs compete fiercely for new accounts. Between 1990 and 1997, AFP sales force in Chile grew from 3,500 to 20,000.

High administrative costs cut deep into the net return on investment to the account holder. During 1991-95, AFPs reported an average rate of return of 12.9%, but management fees lowered it to a net of 2.1%. For a new worker enrolling in 1996, the 3.5% gross yield actually amounted to a -6.8% return after taking management fees into account. (Idemoto, 2000)

Another important element of the new system is that the workers bear investment risk. This was not a serious problem in early years of the system for Chile due to high average returns produced in the 1980s and early 1990s. Recently, however, returns have been poor. In 1994, more than half of AFPs incurred losses. Between 1995 and 1998, returns were -2.5%, 3.5%, 4.7% and -1.1% respectively. Workers actually lost much when management fees are factored into the return. As a result, Chilean government had to ask workers to defer retirement until the situation improves.

The new system has been harsh on low-income workers and women due to flat fees and high administrative costs. Chilean women are paid less, work more intermittently, and live longer. Moreover, individual accounts do not allow for redistribution of income as does the pay-as-you-go systems.

**IV. The Social Security System in Britain**

Britain has a two-tier system. The first tier is called the basic state pension (BSP) introduced in 1908. It was a means-test system, not based on worker contribution. In 1925, the system was redesigned to mandate worker contribution and to replace means-tested system by fixed benefits for all workers. The second tier, called “graduated pensions” was added in 1961 to supplement the basis state pension. It was replaced in 1978 by a more generous State Earnings Related System (SERPS) run on a pay-as-you-go basis. From the beginning of this program, employers were allowed to contract out of SERPS and introduce their own pension plans. In 1988, legislation was passed to allow employees to opt out of SERPS or employer-sponsored plans and invest in personal retirement accounts, known as Appropriate Personal Pensions (APPs). The government has been actively encouraging workers to contract out to private accounts with various incentive schemes, including lowering of SERPs benefits (John. B. Williamson, 1999). Britain is the only country in the G-7 group with a partially privatized pension system.

Troubling aspects of British Privatization

There is a great potential for confusion among workers when they are challenged to choose an individual account. Given the complexity of the subject matter, they are often tempted to forgo in-depth research and defer to the experts. As a result ill-informed workers are often left to deal with self-interested pension seller. According to a Wall Street Journal article (8/10/98), British regulators estimate that during the early 1990s more than two million workers (of the approximately 6 million workers enrolled in APPs) lost money due to bad financial advice. A
1993 study commissioned by British regulators found, in a random audit, that 91 percent of 735 personal pension clients sampled received “unsatisfactory” or “suspect” advice (Orzag, 1999). Pension brokerages enjoyed windfall gains from the reforms. One salesperson interviewed by the Wall Street Journal reported making $16,000 in commissions during his best week of sales.

The British system was also plagued by high administrative costs: Analysts in Britain have found that the expenses averaged around 2.5 percent of assets, twice that estimated by the CATO institute. Over an average career and retirement, such fees reduced the value of an individual account by 25 percent. Retired workers also incur costs when purchasing annuities. It is also important to note that depending on interest rates, life expectancy projections, the value of annuity benefits can vary widely. According to a recent article in The Guardian, Britons who retire in 2000 can expect to receive monthly annuity payments 42 percent less than those who retired in 1990 due to decreases in interest rates and increases in life expectancy projections.

Britain’s low income workers and women are likely to get hurt the most if they opt out, which may be forced on them by the falling benefits under SERPS. They will be facing high administrative cost due to their lower average account balances and more intermittent work histories. Income inequality is expected to rise as SERPS cuts are implemented.

V. Reforming the U.S. Social Security System

The second Bush Administration has taken on the cause of privatization with the same zeal as it took the cause of Iraq war during the election. President has made the overhauling of social security system as the central part of the policy of his second presidency. But the details of his plan have not been fully revealed. When asked about his plan for social security reform at his Dec 20, 2004 press conference, he deflected the questions by saying, “I will propose a solution at the appropriate time.” He favors workers diverting a portion of their payroll taxes to private accounts, and he thinks he can make it possible without raising taxes, which the critics say is impossible without falling deeper into budget deficit. The privatization of social security is not a new issue for President Bush. When he was running for the presidency in 2000, he talked about developing a way to get a better return for the workers money by allowing them to take some of their money and set up personal savings accounts. In 2001, he appointed a commission to look into strengthening Social Security and to report on ways of achieving personal savings accounts. The commission chaired by Richard Parson, now the CEO of Time Warner, and late Senator Moynihan could not agree on a single proposal, but offered three that were never acted upon. It is now widely speculated that the President would back one of these proposals and the choice is likely to be proposal number 2, which provides for 4% of payroll tax up to a $1,000 to be diverted to private account and indexing the benefits to inflation instead of wages starting from 2009. This proposal has been highlighted in the 2004 economic report of the president.

President appears determined to make changes to the system in spite of any apparent immediate threat to it. He has described the U.S. social security system as one in crisis and it must be attended to sooner than later. The question that many ask is: Is there really a crisis in social security system? A staunch critic of administration’s privatization plan, Paul Krugman, thinks it is an “invented crisis,” and points out that partially replacing the current system with private accounts won’t do anything to strengthen it, it may even make it worse (New York Times,
December 7, 2004). The costs associated with the implementation of president’s plan can be overwhelming. Joshua Bolten, director of the White House’s Office of Management and Budget, has said government finances may have to sink deeper into the red to finance the president’s plan. The implementation of president’s plan is estimated to involve a $1,000bn in transitional cost over the first decade. (FT 11/29/04). The impact of this on the budget deficit which has reached $413bn in 2004 is not likely to be well received by fiscal conservatives in Congress unless it is tempered with some tax increase and benefit cuts.

The strategy of the reformists and supporters of president’s plan has been one of questioning the solvency of the current system and undermining public’s confidence in its survival. Approaches often involve even denying the existence of Social Security Trust Fund, and even when its existence is recognized, declaring that its assets are not real.

Many do recognize that some action needs to be taken to ensure its long-term health as it faces the impact of retiring baby boomers in the coming decade. It is projected to remain solvent until 2018 at which time benefit payments are expected to outstrip receipts as the huge post-war baby boomer retire. It is also expected to continue to finance the benefits until 2037 with the help of the accumulated trust fund. These predictions are based on adverse projections on the economic growth, worker productivity and immigration policies. Recent developments in the market and the economy led the CBO to revise these dates to 2023 and 2054 respectively. The program will eventually face the actuarial imbalance in the long run. The question then is: Can it be fixed without destroying one of the most successful government programs in the U.S.? For many, the answer is yes.

President Bush’s reform plan has support from powerful conservative groups in Washington and elsewhere. Chief among these groups are the Cato Institute, a conservative think-tank (supported by such companies as AIG, State Street Boston Corp, American Express Corp, Quick & Reilly Group Inc.), The Club for Growth (a group which raises money for republican candidates), Alliance for Worker Retirement Security (a lobby group representing Wall street and the manufacturing industry), and Economic Security 2000 (agency funded by such companies as Dupont Co., Morgan Stanley & Co.). Each one has its suggestion for privatization. Club for growth hopes to spend $15 million on a media campaign to back the White House plan (David Morgan, Reuters, December 22, 2004). These groups claim they are fighting for the benefit of workers by way of better returns, improved efficiency and freedom of choice. What is not clear is why they are all funded by finance industry instead of workers.

Under Cato’s plan, fifty percent of the current contribution to be diverted to individual accounts. Individuals who choose this option will be given a recognition bond based on past contributions and they will forego accrual of future benefits from traditional social security. The remaining fifty percent of the payroll taxes will be used to cover transition costs and to finance disability and survivors’ benefits. Workers who choose stay with old system will get whatever the benefits the system can afford with the existing level of taxation.

There are also many groups, mostly liberals, who have expressed their opposition to the privatization plan out of concern for high cost and uncertainty of benefits associated with privatization. These groups include Campaign for American’s Future (which unites labor
unions, minority, women’s and disabled groups, the AARP) and the Brookings Institute. They argue that fluctuations in the financial market could jeopardize retirement security for those whose investments are unsuccessful. In addition, high cost of administering small accounts, marketing charges, and management fees, as experiences in Britain and Chile indicate, would take a big bite of the workers savings. Added to these problems are the high transitional costs, which are estimated to be between 1 and 2 trillion dollars over the ten-year period. According to a 2002 Social Security Administration’s projection, the proposal number 2 reform could put a $1,500 bn (in 2001 dollars) drain on the unified budget during 2005-2014, assuming 100% participation in the plan (FT October 21, 2004).

The opponents of privatization question Bush’s claim that the crisis is immediate and also his figures on the size of imbalance. They have many suggestions for improving the existing system and ensuring its long-term stability. Some of their suggestions are: (1) increasing the retirement age and indexing it to current longevity standards, (2) increasing social security taxes by raising the $87,900 income limit or eliminating the limit entirely, (3) mandating social security coverage and participation to 3.7 million state and local government employees who are currently excluded from the program, (4) fixing the cost of living adjustment, (5) dedicating a limited estate tax to social security, and (6) creating a failsafe mechanism by instituting a flexible payroll tax system.

According to Olivia Mitchell, a professor at the Wharton Business School, who was a member of the Presidential Commission, the proposal number 2 of the commission would fix the solvency problem without private account. She said: “Indexing benefits to inflation rather than wages will put it back to actuarial balance. It is more politically attractive to introduce personal accounts as well” (FT November 8, 2004).

Public Opinion

Public opinion seems to support the idea of privatization. When asked “Do you think the people should have the choice to invest privately up to 5% of social security taxes?” in a poll conducted by Fox News in January 2004, 67% answered with “yes”, 9% with “no opinion” and 24% with “no.’ However, the level of support appears to diminish when some of the risks are pointed as was done in a Los Angeles Times poll conducted in December 2002. Only 38% came out with a support for privatization. (Newsbatch.com, updated September 2004)

Experts believe that the issue of privatization is not well understood by the public. A Wall Street Journal/NBC poll in the middle of Dec 04 found that by 50 to 38 percent of the respondents thought it was a bad idea to allow workers to invest a portion of their social security taxes in the stock market. Most Americans are not aware that Bush plan calls for reduction in benefits since he has ruled out raising payroll taxes.

VI Relevance of Chilean and British Systems

When considering the relevance of the Chilean system to other countries, one must consider three issues:
whether the country will find the benefits of a privatized system outweigh its cost
the timing of the change with respect to fiscal situation
the possibility of an alternative system which may have a lower administrative cost and an
annuity market that functions better than in Chile.

Chile’s social security system was highly inefficient before the privatization. The U.S. system in
contrast is extremely efficient. All administrative duties are performed at a cost of 0.9 percent of
net contributions.

Chile had funding problems even with payroll taxes double that of the U.S. system and was
unable to pay the promised benefits. Even with the pessimistic projections of the Social Security
Trustees, the system will be completely self-sufficient and fully funded until 2037. If economic
growth in the U.S continues at the same average rate it has been for the past 50 years, then our
system will be fully funded indefinitely. With minor changes, the system can be made self-
sufficient until 2075 even with the pessimistic growth scenarios.

Based on the experience of Britain, it is suggested that the cost of management in the U.S. will
be around 2.5% of assets per year. Over an average career and retirement it will reduce the value
of the accumulation by 25%. When added other expenses such as alterations, annutization and
temporary stoppage, it means approximately 43% of the average worker’s account will be spent
on fees before the first retirement check is out.

Privatization will remove egalitarian aspects of the current social security system and place low-
income and women at risk.

Market fluctuations create uncertainty for retirees. While the 70-year average real rate of return
on the stock market has been 7 percent in the U.S., the 20-year average real return on the stock
market fell to zero three times since 1900—from 1901-1921, 1928-1948, and 1962 to 1982.

Reference:

Asociacion Gremial de Administradoras de Fondos Pensiones, *The Private Pension Funds
System in Chile*, December 1994.

Barreto Flavio Ataliba, and Olivia S. Mitchell, “Privatizing Latin-American Retirement

Diamond Peter A., “Proposals to Restructure Social Security,” *Journal of Economic Prospectus,
Vol. 10, No.3, Summer 1996

Economy by Barry P. Bosworth., Rudigar Dornbusch, and Raul Laban, editors, *The Brookings
Institution*, Washington D.C., 1994


Financial Times, October 21, 2004


Newsbatch.com, Updated September 2004.


The International Center for Pension Reform, *The Chilean Private Pension System*, Santiago, Chile


Wall Street Journal, 8/10/98