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PRIVATIZATION OF SOCIAL SECURITY PROGRAMS

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Panelists:	CAMILO J. SALAZAR					
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Recorder:	CHARLES BARRY H. WATSON					

- The Chilean model
- Trends in other Latin American countries (Mexico, Argentina)
- Trends in Europe and Eastern Europe

MR. CHARLES BARRY H. WATSON: We will begin the session with Bob Heitzman's remarks, because they are of a somewhat generic and theoretical nature. Camilo Salazar will talk about Chile and other developments in Latin America. The formal presentation will conclude with Krzysztof Stroinski, who will speak about developments in Poland and other countries of eastern Europe.

My credentials for this role include the 20-odd years I have spent as an international benefit consultant for the Wyatt Company, just prior to my recent retirement.

For many years, Bob Heitzman was the head of the international benefit consulting division of Kwasha Lipton. He retired from that firm about three years ago, and since then has been involved in international consulting assignments and writing books including one on *Employer's Guide to Social Security* (John Wiley & Sons, 1993).

I will present Bob's remarks and expand on them with some observations for which I am completely responsible.

Bob begins very properly with a discussion of the question, what do we mean by privatization of Social Security? Privatization has certain meanings to some people and other meanings to other people. Social Security is a very broad concept, embracing government-mandated programs of coverage to residents of a country – sometimes all residents, sometimes specific groups of residents – for certain risks that could affect their long-term economic security.

A wide variety of risks can be covered. Injury or death resulting from on-the-job accidents is usually one of the first risks covered by Social Security in any country. We think of it as workers' compensation, and it is designed to protect the economic security of the person who is contributing to the economic productivity of the country. Another type of risk is disability or premature death that does not result from an on-the-job accident. This is usually given a somewhat lower priority by governments, because it does not directly affect productivity of the country. Most developed countries do have coverage of this type, however, with benefits typically consisting of some sort of cash payments, periodic sickness payments or lump-sum

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payments in the event of death or certain types of disability. In the United States, this is the sickness disability insurance (SDI) part of Old-Age, Survivors, and Disability Insurance.

A third type of risk, and this is what we normally think of as Social Security, is the risk arising from old age; i.e., the risk of untimely survival. It results from the inability of retired people to produce income at the level that they were used to in their active working years. This is the old-age part of OASDI.

Most countries provide coverage against the occurrence of medical expenses resulting from accidents and sicknesses, both job-related and otherwise. Developed countries around the world typically have very developed systems of health insurance. The United States, of course, has very limited coverage at the present time but, as we all know, there is a possibility that we will soon see developments in that area, so the United States may join, or at least come closer to, the other countries of the world.

Finally, there are some "peripheral" benefits. Family income payments -- payments to support children -- are very common outside the United States. Lump-sum death benefits, typically to cover funeral expenses, are also prevalent.

In this discussion of privatization, we will focus on old-age benefits, because they involve the buildup of capital during an individual's working years and the paying out of that capital after the years in which he or she is economically active. This, in theory, should lead to the buildup of a fund for each individual. Whether in total there is a buildup of funds will depend, of course, on the demographic characteristics of the covered group. In the United States we currently have a huge net surplus of Social Security receipts over disbursements, and this leads to the accumulation of a fund that will be used in later years to pay out earned benefits.

In the United States and in most other countries, Social Security is supported by contributions or taxes that are tied to employment. That isn't necessarily the case. Some countries support the Social Security system in part, or in the case, say, of Australia, in total by payments out of the general funds of the government. Most countries, however, require contributions from employers and employees that are dedicated, in one way or another, to the support of the Social Security system. In some countries, the taxes are allocated quite distinctly among the various elements of the program. In other countries, such as in the United Kingdom, they may be unified. One amount is then paid to support the entire governmental benefit package.

Now, what do we mean by privatization? Bob views it as referring to how Social Security programs will be administered and invested. In the United States, Social Security is administered by the federal government through the Social Security Administration. In other countries, it is administered by institutions that are owned by the government or by institutions that are supervised by the government, either through a licensing procedure or by some other means.

Viewed from this perspective, the significance of privatization has less to do with the identity or ownership of the administering entity than with the issue of investments. If a system gives rise to the accumulation of assets, there is the question, how should those assets be invested, by whom, and in what?

Now, I might add that there is another way of viewing privatization, which comes out in the long run to much the same thing. The other view of privatization is, basically, who assumes control over the assets? By this I mean, does the Social Security system produce a pooled fund from which benefits are paid out at the end of the day according to a particular, but often mysterious, formula, or are accounts established for the individual participants, with the individuals believing that they have some control over those accounts? As I say, this ends up often in the same result, but it is fair to say that there can be some differences.

Now, what are the ways in which any accumulation of surplus assets under a Social Security system can be invested? First, you can take the assets and use them just to meet the current operating expenses, set up a book reserve for any excess, and then draw on this reserve by tapping general revenues of the government whenever the demographics dictate that there is a deficit of contributions as compared to benefit payments. This is the book-reserve approach.

Second, the administrating agency could invest in various types of securities, which are then liquidated whenever the demographics change. These securities could be government bonds, loans, or even equity investments, both domestic and foreign. They could be investments in infrastructure, and we have recently seen a lot of discussion in the United States about using even private pension funds for investment in the infrastructure. If the administrating agency is the government, you could call this the socialist approach. If the administering agency is a truly private institution, you could label it a capitalist approach.

The third approach is based on segregated assets, as compared to pooled, and calls for the investment decisions being made by those individuals on whose behalf the funds are accumulating. You could consider this a populist approach; i.e., the beneficiaries have control over investment. We will see that this is the approach used in Chile.

Thus there is a spectrum of nonprivatized to privatized approaches, running from the book-reserve approach through socialist and capitalist approaches, and then finally, at other ends, the populist approach. Now, how would one rank the methods used around the world to deal with Social Security financing in this spectrum?

The United States is often said to use a book-reserve approach. But because the monies supporting the U.S. system are invested in a special type of governmental bond, which is functionally identical to government bonds that are sold to private investors, you could argue that the U.S. system is a very conservative -- because government bonds are viewed as safe -- and passive version of the socialist approach.

Another system that is worth looking at, which Bob labels as being a socialist approach, is the one used in Singapore. Here a central provident fund is running up huge surpluses that are invested under the supervision of a central committee in both domestic and foreign securities, and, I might add, in infrastructure. The investment strategies, as well as the contribution levels, are part of the central planning of the economy. In Singapore, you see enormous variation in the level of required contributions, depending upon whether the government wishes to encourage productivity. Bob considers this to be the epitome of the socialist approach. It could be argued,

however, that because there are individual accounts (the persons who "own" or who are the beneficial owners of these accounts can draw upon them for loans in some circumstances, and the benefits are tied directly to the balance in the accounts), it is more properly seen as a governmental populist approach. This is important to keep in mind, because privatization is, to many persons, tied to the question of whether the individual has his or her own stake in the system; that is, there is a fund that continues to be identified with him or her. This, at least, is the way in which the argument tends to run in Chile.

Another possibility, though, is the Indonesian approach. Here there is also a provident fund. A provident fund is like a savings account. It is a form of Social Security that is used in many developing countries. It is easy to ask for contributions from employees and employers and put the money into an account that accumulates interest. The money is used, typically, for governmental purposes until it is needed for benefits. It is a pool of money that the government can draw upon as it wishes. Indonesia has a provident fund, but it is administered by a state-owned enterprise under the supervision of the Ministry of Manpower. It is not the government; it is a separate entity, and the investments are at the discretion of the management of that entity. Although it reports to a branch of the government, it is much more independent than the manager of the fund in Singapore. There is a blend of socialism and capitalism.

Another alternative is the contracting-out approach, used in the U.K. and Japan, in which large companies can escape participating in part (or all) of the Social Security system, provided they set up their own pension funds providing equivalent or better benefits. Here, the investment of the money is at the discretion of company management, although it is subject to regulatory constraints. This is an example of the capitalist approach.

Finally, there is the populist approach. The only pure example to date is the Chilean system, although, as Camilo will tell us, some other Latin American countries are considering similar systems. You do see echoes of it elsewhere. In the United States, IRAs, for example, represent a populist approach to savings. There are registered retirement savings plans in Canada, "personal pensions" in the United Kingdom, and various other situations.

Now, what are the real issues involved here? What are the pros and cons of the various approaches? How does a country decide whether or how far to privatize Social Security? One important question is security of benefits. Which of these approaches maximizes the probability that the promised benefits will materialize? What are the macroeconomic effects? Which approach has the most favorable effect on the underlying autonomy? These are all debatable issues, and on which there is no solid consensus, perhaps for answers but at least for explication.

I wish to turn now to my other panelists. Camilo Salazar is currently director for international development for the Principal Financial Group. His professional career as an actuary has been entirely related to international life insurance business in Europe, Africa, the Far East, the Caribbean, and Latin America. Before he went to the Principal Financial Group, Camilo was the chief actuary for Latin America and the Caribbean for AIG. He then lived and worked in Europe for several years. He began

his actuarial career, in the international reinsurance department at Lincoln National. He holds a master's degree from the University of Iowa and a mathematics degree from Xavier University. He will talk about Chile and other parts of Latin America.

MR. CAMILO J. SALAZAR: I'd like to preface my presentation by talking about what's happening in Latin America today and why so much attention is being focused on it today. Latin America right now is a very interesting phenomena because it shows in the Chilean experiment what the future might look like if the rest of Latin America follows through with some of the changes that are being proposed. Chile started a process ten years ago, after Allende fell and Pinochet took over, that most of Latin America is now starting. At that time, Pinochet basically did a turnaround in economic policy, which is very similar to what the rest of Latin America is doing. So, we can see in Chile what the future looks like if the rest of the continent follows through with the privatization programs that are very much in progress in Mexico, Argentina, and other countries. And so it presents a unique opportunity of being able to see the future.

In Chile, at the end of the 1970s after the Allende regime, the economic climate was in shambles. There was hyperinflation. The Social Security system needed tremendous reform. It was basically bankrupt after having been mismanaged for years. Many attempts had been made during and before the Allende regime to do something; in effect, much like what we're trying to do in the United States with health care. Many political interest and special groups pulled in all directions and nothing really happened. When Pinochet took over in the early 1980s, a rigid right wing administration followed. Political opposition was not allowed; there was really not an active opposition. That created a climate for reform without any pressures, and the process became inevitable and possible.

The legislation that created the Administradoros de Fundos de Pensiones, referred to as Associate Financial Planner (AFP), was instituted in May 1981. To date, it has been one of the most significant social and economic developments in Chile during the last 15 years.

The AFPs are basically private companies set up exclusively for the administration of employees' individual pension accounts. They are closely monitored and regulated by a separate superintendency for AFPs.

The system, in general, was set up with the following characteristics. Employers' contributions to the old system stopped at that point, and the new system did not require employers' contributions either. A compulsory, defined-contribution individual pension scheme replaced the existing state scheme. Disability and death coverage was to be paid for separately by the employee through the AFP system. Starting in 1983, every new entrant had to go into the new system. Workers already covered up to that point by the old system, who were 45 years of age or older, had the choice either to stay with the old system or switch to the new system. Workers under the old system who switched to the AFP were given nontransferable bonds to compensate for the existing liabilities, or service, under the old system. When they retire, they will get benefits based on both their contributions under the new system and their contributions under the old system.

At retirement, the beneficiaries would have, under the new system, several options regarding their retirement benefits. They could annuitize their contributions up to that point directly from the AFP, or they could purchase an annuity from an insurance company in the market. Alternatively, they could get a partial lump-sum distribution of their contributions, but they are not allowed to get it all out, for fear that they might spend it very quickly and then the government would have to take over. Also, the legislation contemplated that if, for some reason, especially for people who did not have enough time in the system to accumulate enough funds, the monthly benefit was below a subsistence level, the government would make up the difference.

More than 90% of the workers switched to the new program when it was implemented. Obviously, that 90% was helped by the fact that anybody 45 years or younger had to come into the system.

During the last 13 years, the investment return on the funds of the AFP system has been quite high. Most recent statistics show an average annual rate of return, adjusted for inflation, of approximately 13% since 1981. I have just received a very brief update. The lowest return to date has been 3.6%, and the highest return has been 32%. For the period November 1991-November 1992, the return was 4.9%. As this was about 27 percentage points less than in the previous 12-month period, there has been a dramatic swing in the returns and the yield of the funds.

MR. WATSON: Has that been matched by a change in inflation?

MR. SALAZAR: I don't think so. I don't think it necessarily has been correlated to inflation. I think that it has more to do with how the government prescribes the kind of investment vehicles to use, and there have been some changes in that recently. The total assets of the AFP system in Chile are around \$13 billion, with monthly contributions of about \$200 million into the system. The AFPs have become the largest investors in the country, and they have basically saturated the investment market.

The system has contributed to some interesting by-products. Because benefits under the system are based entirely on individual contributions, there's no opportunity for political manipulation for more or different Social Security benefits. As the returns on the AFP investments have been relatively high, so far, workers as participants in these funds have developed a substantial equity ownership in Chile's private industry and private economy. They have begun to support economic policies that secure private property and support a free market. It's interesting because, in the political context under which the system was instituted, even though Pinochet had come into power and ousted Allende, Allende was put into power by the unions, and the unions at that point were very much leftist and Marxist oriented. They opposed, as much as they could, the institution of the AFP system. One of their complaints was that Pinochet was shoving his capitalistic approach, down their throats and robbing the workers of their rights. The unions are the first to admit that they were basically blowing out a lot of hot air, and they endorse the system. The workers themselves endorse the system.

Some additional general characteristics of the system are as follows. The new Social Security legislation established a new system of retirement, disability, and survivor

pensions. It eliminated state influence in the financing of these social benefits, and this responsibility was effectively transferred to the individual, who must finance his or her own benefits in the private sector. Employees may choose to participate in any AFPs that currently are licensed to operate, and no person can be refused membership in any of the AFPs. Contributions are made through payroll deductions and are submitted to the AFP of choice. An AFP may be established by financial institutions, including insurance companies, and by employers as well. They are supervised by the superintendent of fund administrators. The AFP, which has a minimum capital requirement, is responsible for the payment of benefits, although minimum retirement pension benefits are guaranteed by the government, in case the benefit falls below a subsistence level. The law also required that life and total permanent disability benefits be insured with an insurance company. So it also created, overnight, a huge market for insurance companies to offer these benefits. Participation in the new system is now compulsory for all public and private-sector employees, with a few exceptions for persons covered under small pension schemes that remain from the old system (which are basically restricted to remote areas in the country that are not easily accessible to the AFP distribution systems) as well as for those who chose to continue under the old system. Self-employed individuals may elect to participate on a voluntary basis.

The normal retirement age is 65 for males and 60 for females. The employee savings contributions are basically 10% of wages, by law. For life and disability coverage and fees to the AFP, an additional 3.5% is payable. That's where the competition is between one AFP and another. By law they all receive 10% from participants. The different AFPs determine, at their discretion, how much to charge for fees and how much to charge for the life and the disability coverage that they contract with another insurance company. Most AFPs are owned or closely related to insurance companies so that benefits flow right through, and it's another source of profit for the AFP.

The AFP's only direct source of revenue is the fees that it charges on the contributions. It is not allowed to take any additional fees for administration or return a spread on the investments. So there's a competitive element there among the AFPs. Fees are typically about 1.5%. The other charge includes the premiums for the life and the disability coverage. In some cases, the insurance companies provide a dividend back to the AFP, based on some participation in the underwriting profit.

For the purpose of determining how much total contribution an employee can make, because an employee can contribute on a voluntary basis above the 10%, there is a limit of, basically, 60 UF. The UF is a developmental unit that was created by the Chilean government. It's basically an index unit that indexes the currency to the dollar; it's updated on a monthly basis, based on the consumer price index. A UF is currently equivalent to about \$22. So the current ceiling on a contribution is 10% of salary or about \$1,300, whichever is greater. These contributions are deductible from taxable income. Each employee can be affiliated with only one AFP, even if he or she has multiple employers. At hire, there's a 30-day period to communicate to the employer which AFP the employee wants to be affiliated with, and the employer has 30 days to communicate to the different AFPs which employees have joined or left the different AFPs.

With respect to the investment of the funds, the legislation prescribes profitability guidelines for the investment performance of the AFPs. It defines a minimum yield required, which is expressed as the smaller of two figures. One is the average aggregate yield obtained by all the AFPs, minus 200 basis points; the other is 70% of the average aggregate yield obtained by all the AFPs. So, it prescribes a minimum level of performance. To ensure that each AFP meets this minimum vield, each AFP must establish a fluctuation fund, which is part of its general reserves, and which is valued each month and is funded by those amounts produced by yields in the general funds in excess of the aggregate yield. If the average yield is 8% and an AFP has some investments yielding 13% or 14%, the AFP must allocate an amount to the fluctuation fund out of that difference. Amounts in this fund, which forms an integral part of the assets of the AFP, can only be used for the following purposes: to make up the difference in case the general fund fails to meet the minimum vield or to increase the overall yield of the general fund in any given month at the discretion of the AFP, as long as the fluctuation fund balance is not affected in excess of 10%. So, the fluctuation fund cannot be manipulated to increase the yield.

The government also prescribes very specifically which types of investments the AFP can use, as well as the quality of the investments used. Currently, only 5% of the assets can be invested in equities, and they must be equities of A-rated companies. Corporate bonds also have to be from A-rated companies. Treasury bonds and CDs are also allowed. Legislation is currently being proposed that these limits and these guidelines be expanded and liberalized. Under the proposed legislation, AFPs and associated life insurance companies would be allowed to diversify their equity portfolios and invest in new instruments, including start-up projects and venture capital. AFPs would be allowed to invest in most of the 240 stocks now listed on the Santiago stock exchange, instead of the 40 most tradeable stocks presently allowed. In practice, their funds have 50% of the investments concentrated in eight companies.

Another issue is that, because the system has been so successful at investing in Chile, it has basically saturated the investment market to the point that the government has had to start liberalizing the ability of AFP companies to invest outside of Chile. It started with 1.5% of assets a few years ago, and increased the limit, six months later, to 3% of assets. In September 1992, the limit went up to 5%, and I believe it has been recently increased to 10%. This trend will probably continue. As we will soon see, Argentina is going to start its project, allowing at least 20% of assets to be invested in foreign assets. And I think it's clear that, as the global economy consolidates even further, Chile and countries with similar systems will have to continue expanding the use of investment opportunities outside of the local markets. As of the end of last year, the government risk classification committee had authorized AFPs to invest in bonds issued UL guaranteed by 43 financial institutions in eight countries: Canada, France, Germany, Italy, Japan, Switzerland, the U.K., and the U.S.

The AFPs charge an administration fee, as I mentioned before, to the individual account holder. This fee can be either a percentage fee per deposit, a flat fee per transaction, or a combination of the two. The AFPs compete with each other for individual accounts based on the level of these fees, as well as on the investment returns offered to the members. The AFPs can also charge a fee for transferring

accounts from one AFP to another, and in some cases, for the provision of retirement benefits as annuities, which is a secondary market that is starting to develop in Chile as the system is now 12 years old and members are beginning to retire. By law, they have to purchase an annuity from an insurance company. Initially, it had to be the same insurance company that was associated with the AFP. This requirement has now been relaxed, leading to competition. Individuals can transfer their accounts from one AFP to another under certain restrictions, either during the accumulation period, before they retire, or during normal retirement, but not during retirement as a result of total and permanent disability. In that case, the member must remain with the same AFP.

Chile's privatized pension system is now a little more than ten years old and can be, therefore, reviewed in terms of its experience. It has been labeled a success by most, although there are some critics, and is being considered as a model for other countries in the hemisphere that now face concerns similar to those Chile dealt with when it established the program in 1981. Although unions in Chile initially denounced the program as a ploy to commit the workers to Chile's authoritarian capitalism, they now admit that their initial opposition was wrong.

There are, however, those who think the system is not likely to deliver as much as it promised initially and that the government and the workers may not fare as well as originally thought. Though the real returns on investments have averaged more than 13% in the last ten years, these returns are likely to decline in the next few years. The high returns of the 1980s, they say, are due to one-time capital gains in stocks and bonds incurred through privatization and falling interest rates. The Chilean economy is now at a point at which it is unable to absorb the tremendous buildup of capital. To alleviate this, the government has begun to increase the percentage of assets that can be invested outside. But even with a limit of 20%, some say the real returns will continue to decline. Coupled with a decline in earnings is the increase in the AFP's cost. Operating expenses and life and disability premiums average about 25% of members' contributions. Because these funds cover two-thirds of the four million workers in the AFPs, the remaining AFPs must compete by spending considerable amounts in sales and marketing efforts.

The critics estimate that workers are likely to receive pensions worth less than half of their wages in active employment. Furthermore, they claim that half of the current workforce will receive pensions in the future that are below the subsistence level, and therefore the government will have to come in and complement them. The government is also likely to incur additional expenses as the competition among AFPs intensifies and the government tries to monitor a larger number of them, which makes the chances of failure for some of them increase. The government will then have to come in and bail those out because, under the system, the government is responsible for providing a guarantee against AFP bankruptcy, mismanagement, or fraud. Based on these arguments, these critics conclude that because the system is nothing more than a system of compulsory savings, workers could do better by investing on their own. This seems to be a simplistic argument. Supposedly, governments could find a properly run state system to be fair and less expensive. This is easier said than done. After all, that's what Chile walked away from, and yet some critics are now saying that was probably a better system and a better approach.

The apparent success, to date, of the Chilean model has attracted the attention of several countries that find their own Social Security systems in need of restructuring. In Latin America alone, Argentina, Colombia, Peru, Mexico, and Venezuela have developed, or are in the process of developing, their own customized versions of the Chilean model.

As we speak, Argentina is debating in Congress its own version of the private pension legislation. It was supposed to be approved about three weeks ago, but is still being debated, and there's now some political maneuvering in the process. The structure of the program is to be very similar to the Chilean model. There will be a pension administration company system similar to the one described for Chile. The total employee contributions will be 11% of wages, out of which the companies and the AFPs will charge a fee for administration and a life and disability premium, with a net savings element perhaps in the neighborhood of 8-8.5%. Unlike Chile, the AFPs will only be able to charge fees on deposits. They will not be allowed to charge fees for the transfer of accounts from one AFP to another.

Unlike Chile, the central bank will be allowed to own an AFP. This is part of the political posturing that is going on, in which the opposition, in return for its approval of the process to continue, was able to get some concessions from the government. At this point, one of the concessions, and the most debated one, would be the ability of the central bank to create its own AFP and to offer yield guarantees that the private AFPs will not be able to match except at their own risk. The government is to guarantee the minimum yield of the central bank's AFPs. This guaranteed yield will be calculated on a prefee basis. In effect, this AFP will charge an administration fee only to the extent that the overall yield is more than the guarantee, and it will guarantee this on the gross 11% contribution, not on the net of 8% or 8.5%. This special treatment is defined in the legislation under a famous Article 39, which is the result of political pressure from the opposition party and special interests.

In Argentina, the central bank has no credibility in the country whatsoever. Recently, an insurance company developed a poll, asking Argentineans on the street where they would feel most comfortable placing their pension money under the proposed new system. The poll provided a list of ten financial institutions' five were local institutions and five were foreign, fictitious names. Those five placed in the top five spots, and the central bank placed in the tenth slot. So, there's not much credibility in local financial institutions, whether private or government. And there's a lot of pizazz about foreign names. Citicorp, for example, is considered the most stable institution in Argentina. So a lot is riding on the perception of this issue.

Another aspect of the Argentinean model is that, initially, new life companies will have to be licensed for life and disability business only in order to assume that business under the new system. Existing companies, most of which also do property and casualty business, will not be allowed to write this business. The reason is that the government doesn't want the up-and-down cycles of the property and casualty business to compromise, in any way, the financial health of the life company. The consensus is that a premium of perhaps 2.2% of salary out of the 11% contribution, will be appropriate for the life and disability coverage. But it's a very blind consensus at this point, because there are no statistics as to what the experience might be. The

2.2% figure has been estimated from the Chilean experience, but it might not be appropriate for Argentina.

Peru has already enacted legislation, and regulations have been put out. The system is supposed to start enrolling participants May 1. Once the legislation has passed, there is a period of some months for the companies to be set up, capitalized, and established in systems development and so on. Then they start enrolling May 1, and there's usually a 90-day period to enroll. There will be a frantic rush to enroll as many people as possible, because everybody on the streets is a potential customer. So the companies will go at it with a vengeance, trying to capture as much business as they can. In some cases, they will not worry about administration until later, which will create many problems.

Colombia's project is very similar to Chile's, and Peru's. There will be a contribution of 13.5% of wages to the AFP, but unlike in Chile, 10% of the contribution will come from the employers, not the employees. The legislation will be debated later this year, and more specifics will be known then.

Venezuela has also proposed legislation creating a private Social Security system that is similar to the Chilean model. The legislation, however, forms part of a larger bill that includes labor law legislation, and that is being debated. The labor law legislation, which is opposed by the unions, is delaying the whole package. So nothing really is happening in Venezuela at this point.

Mexico has instituted the summary annual report (SAR) system, which stands for savings and retirement in Spanish. It is a simplified version of the Chilean model. It's almost not similar at all. In it, the employee contributes 2% of his or her paycheck toward an individual account, which currently only banks can capture. It is thought that this was part of the political favor after the nationalization of the banks. The government is expected to increase the mandatory contribution level over the years and allow insurance companies to hold the accounts, starting later this year. A key difference under this approach is that the SAR is supplementary to Social Security, not a replacement for it.

In closing, I would say that the Chilean model is seen as a basis for alternatives to governmental Social Security systems, with various degrees of similarity. How this will succeed or fail in other countries depends, to a large extent, on the social, economic, and political environments in which they are operated. To assume that the Chilean model will work as effectively in other countries is to simplify the complexity of the issue and to ignore the political reality of the country. It is important to know that the Chilean model was implemented in a political vacuum and therefore was free of political and special interest group pressures. That is not necessarily the case in other countries, where these pressures can derail the process before it has an opportunity to succeed. In Argentina, this is starting to happen. The legislation has not been approved. It has been stalled in the legislature for about a month now, just because the opposition doesn't show up for a vote on it. This exerts political pressure. So the spirit of the project, which remained pure in Chile because it was instituted unilaterally, is already starting to be compromised in Argentina. Perhaps this will also happen in Peru and Colombia and Venezuela, because it will be put through the political process. So the success of the model might be questioned, depending

on how much the political environment and economic and special interest groups alter the original legislation.

MR. WATSON: Krzysztof Stroinski is a Polish Canadian. He was born in Poland and is a Polish citizen, but he is a resident of Canada. He received his master's degree in mathematics from the University of Warsaw and a doctorate in actuarial mathematics and statistics from Heriot-Watt University in Scotland. He is currently an assistant professor at the University of Western Ontario, teaching in the statistics and actuarial science department. Krzysztof has a very interesting relationship with eastern Europe at this time. Some three or four years ago, the Ministry of Finance in Poland was bringing in legislation to permit the establishment of insurance companies. It recognized that it needed to refer to actuaries in this legislation and, to make the word meaningful within the legislation, it needed actuaries. There had been an actuarial profession in Poland earlier, but it had essentially vanished during the Communist period. Krzysztof was asked to organize a program to train actuaries, which has been going on for three years now, and it is so successful that last year 19 actuaries from five different countries lectured to more than 100 students. Krzysztof is also the elected President of the Polish Actuarial Society.

With that as introduction, I would like to call on Krzysztof to talk about eastern Europe.

MR. KRZYSZTOF STROINSKI: In my short presentation, I will concentrate on privatization of Social Security in Poland and other central and east European countries.

The discussion of privatization of Social Security systems in countries of central and eastern Europe is very timely. The collapse of the Communist system in eastern Europe opened up a possibility to introduce less totalitarian and more individualized solutions to all the social issues, including Social Security systems.

Generally, in all former Communist countries, there used to be a single, huge, statecontrolled system of pensions and other social benefits. Rare exceptions included Hungary, where nine schemes similar to employee pension schemes are in operation, eight of which were introduced before nationalization in 1949, and one by Volan, a large transport company in 1990. The Communist state had a monopoly on pension provision, and the state had control of all or most means of production. In comparison with low salaries and wages in the mostly nationalized, state-run economies, Social Security in the past rather generously applied to everyone, even though it had some universal restrictions on the ceiling amounts of the benefits. It was different in individual countries, but achieved the same goal of uniformity.

The current situation in the countries of the former Communist bloc, though varying in different parts of the region, has several features in common, because all countries face similar tasks and difficulties. Poland and Hungary constitute the most interesting study cases, because they are most advanced in the process of transition from the system of universal Social Security toward a not yet well-defined goal of privatization.

In all countries of central and eastern Europe, however, there is a sudden turn toward thinking of private pension provision. The following are the main reasons for this development: a feeling that there is no clear future in the state system of Social Security after the collapse of the old political system; an all-embracing belief that a market economy can, by itself, solve many social problems; and the aspiration of many people to have a better retirement income than the ceiling amounts offered by the state scheme. Further, for some policymakers, there is a strong argument for privatization that is not directly related to the level of retirement income. They see an advantage in creating private pension funds that will encourage individual savings and create capital for investment.

The system of Social Security in its old form has no chance to survive the economic reforms of the post-Communist period. One of the new challenges facing Social Security in eastern Europe is the soaring unemployment, a phenomenon that did not exist, at least officially, under Communism. In Hungary, for example, unemployment is close to 15%. The total amount of paid unemployment benefits rose in Poland by 44.2% in 1992. In the same year, 19.5% of the entire population in Poland received some form of social assistance.

Another challenge, high inflation, created the necessity to level the inequalities of pensions granted in different years and to implement a system of inflation-related reevaluation of pension amounts. At the same time, in some countries such as Poland, Social Security paid out relatively high pension benefits, often up to 75-80% of the last earnings. In Poland, the amount of the average pension, including pensions payable because of death old age, or being an invalid is approximately 58.5% of the average salary in the state-owned economy with the invalids' and survivors' pensions being much lower than the average. An additional burden was created when the opportunity for early retirement, with no cuts to the pension benefits, was opened to ease the consequences of the economic reform. The system of Social Security inherited from the Communist era became too expensive to maintain and required an increase in contributions.

In Poland, the employer pays the entire contribution of 47% of gross salary. Table 1 shows Social Security contributions and expenditures in central and eastern European countries.

I would like to add that the figures were obtained from different sources, and different method's were used to collect them. They are only illustrative.

In Hungary, the system of national insurance is financed by the payment of 10% of salary by an employee and 44% of salary by the employer. Generally, in countries of central and eastern Europe, the employer payment constitutes the whole, or a large part, of the Social Security contribution. Usually, any shortfall in revenue of Social Security in eastern European countries is compensated by the state budgets.

There is also an apparent and dramatic decline of Social Security receipts from both private and public employers because of noncompliance. A number of circumstances have lead to this situation. There is no efficient system of personal income tax. There has been a lack of paying taxes recently. This created a deeply rooted belief that the social benefits are free.

	Albania	Bulgariaª	Czech	Hungary	Lithuania	Poland	Romaniaª	Russia ^b
Contributions (percentage of salary)	0.9%	0%	10 50	10%	10/	0.00	001	
Employee Employer	0%	30%	13.5% 36%	10% 44%	1% 30%	0% 47%	0% 7–25%⁰	1 % 28%°
State budget	deficit	deficit	deficit	deficit	deficit	deficit	deficit	deficit
Expenditure (percentage of GNP)	14%°	N/A	7.8%	10%	14.2%°	7.7%	N/A	N/A

a Data from 1990

b No data from Belorus, Estonia, Latvia, Slovak Republic, or Ukraine

c Depending on the branch of industry

d 20.6% state farms; 5% individual farmers

e Pensions only.

TABLE 1 Social Security Contributions and Expenditures in Central and Eastern Europe

There are doubts whether pension payments will relate to premium contributions. There is a high inflation, which in many cases makes delays in payments profitable.

To limit the increasing Social Security spending, various mechanisms were put in place that restrict the benefit entitlements, impose ceilings on benefit payments, limit the indexation of higher pensions, and delay the recognition of inflation. The aim of all these limitations is to salvage the collapsing system from bankruptcy. But they also give a clear indication that a uniform system of Social Security is not suitable for all salary brackets and all social groups. It is apparent that while the current system seems to be a satisfactory solution for low-income employees, it is not at all suitable for those who have high income. Limitations on pensions mean that benefits are a decreasing percentage of salary, and contributions are a level percentage of all pay. There is a perceived necessity to modify the system in such a way that it will cover the basic pension needs of everyone.

At present, the Polish social insurance institution, Zus, is the only agency that provides pension benefits in Poland. Due to public dissatisfaction with the existing system of Social Security, and because of the system's imminent insolvency if the scheme remains unchanged, efforts are being made to modify the existing structure of Social Security and to introduce supplementary private pension schemes. Several options have been proposed in Poland:

- To limit the benefits of the existing system and introduce private pension funds run by insurance companies;
- To divide the existing system into a two-tiered system with continued major state control; and
- To use proceeds from privatization of the state-owned industry to a second-tier funded system.

Early privatization suggestions in Poland included, for instance, replacing the existing system with a fully funded system, referred to as the Chilean model. It is now rather obvious that what was proposed as a Chilean model could not satisfy the condition of convincing the main interest groups in Poland, that is, employees, employers, and the government, about its advantages over other, more moderate scenarios. Still, the transition problems have only been initially discussed. The problems of the transition stage include the following issues:

- How to provide an adequate pension to those who do not have sufficient time to build a second layer; and
- How not to overburden employers in the public scheme, if the public scheme is not to be drastically scaled down.

For any of the proposed solutions, several preparatory steps would have to be taken. Insurance companies lack qualified pension specialists, experienced with systems other than the current pay-as-you-go system employed by Zus. Tax regulations will need to be modified to exempt insurance premiums for pension funds from taxation, and thus create incentives for participation in supplementary pension funds. Also, pension funds need to be safely invested, and there are still very limited investment opportunities available in Poland. Last but not least, the negative attitude and lack of confidence of a large group of the public with respect to private insurance needs to change. Governments in eastern European countries are already overburdened with other public expenditures and are not particularly keen to give up any fiscal revenue.

The governments, however, would likely have to introduce some tax incentives to encourage employers to fund the new second tier. The same applies to the proceeds from the privatization program of the state-owned industry. It is being seriously proposed that part of the proceeds, perhaps even as much as 25%, could be used to fund the public second tier of the pension provision.

Any attempt to forecast what will happen to the Social Security system in eastern Europe may be seen almost as arrogance. In Poland, however, it is my guess that some life insurance institutions will soon begin offering private pension plans. Their target will likely be the high-income groups as well as individualized insurance products similar to VIPs' pensions. If there is enough demand for those pension plans, it is more likely that some tax incentives may be obtained from the Ministry of Finance (which is also responsible for drafting the budget) to encourage participation and widen the population coverage. As for the reform of Zus, it has been noted that, despite criticisms, it does many things well, not the least of which is on-time and accurate payment to millions of pensioners and beneficiaries who depend on Zus for income support. The reform of Zus, requiring a political will and a parliament decision, may likely be further delayed because of the political turmoil and a very fragile government coalition.

To conclude, I would like to say that, whatever the future developments are going to be, it is symbolic that Social Security systems in eastern Europe are being discussed at the meeting of the Society of Actuaries. This, more than some political analysis, shows that East and West are beginning to speak the same language. We're also witnessing an interesting phenomenon of the possible convergence of two formerly opposite approaches to Social Security systems. There is still, however, rather alarmingly limited actuarial involvement in planning the changes to Social Security, at least in Poland.

Finally, I would like to acknowledge the help I have received in collecting information about various countries in central and eastern Europe from Dr. Gabor Hanak of Hungary, Ms. Baiginat Kamuntaviciene, Dr. Vitalija Gaucaite, and Ms. Jolanta Smuilaityte of Lithuania, Dr. Serguei Romanenko of Russia, Dr. Jan Fausek of the Czech Republic, and Mr. Fisnik Bardulla of Albania. I have also used, quite liberally, material from an article by Dr. Giovanni Tamburi entitled, "Misunderstanding Pension Privatization -- the Case Against Do-It-Yourself Pensions Kits."

MR. WATSON: We have had much discussion recently about the possible inadequacies of the Social Security systems in the United States and in other developed countries. Some people have said that one solution to this problem would be to create individual accounts', in other words, give the money to the individuals and let them deal with it as they wish, as has been done in Chile. We would welcome questions, thoughts, and observations whether this is appropriate for the United States or elsewhere.

MR. MITCHELL I. SEROTA: I have to take some issue with Mr. Salazar's summary, starting with the historical background.

At the end of the 1970s, the Social Security system in Chile was bankrupt. Allende was overthrown in the early 1970s, and so there were another ten years to further bankrupt the system under the Pinochet regime.

When Pinochet took control of the country, an oppressive right wing administration followed. The word *rigid* is a terrible understatement. And certainly the system was implemented in a political vacuum; a strong dictatorship can implement whatever it pleases.

The Chilean system may have had success; I have no evidence that it didn't. But I am concerned with how it was implemented, because where there are discussions, special interest inputs, and debate, as in Argentina, there will be an opportunity for the Social Security system to be modeled to meet the needs of various regions of the country or the economic interests in the country. And that's fine.

One thing that I do not see recognized in Chile is the change in mortality patterns. The system is still stuck with Bismarck's 65; at age 65, you have to retire. That was fine back in the 1880s when Bismarck put in the first Social Security system, and it might have been fine when Roosevelt put in the U.S. Social Security system in the 1930s, but in the 1990s, and even in the 1980s, 65 is just too young an age to retire. The system will not be actuarially sound. I wonder whether in eastern Europe any thought is being given to this. I know that there are different male and female retirement ages but they're wrong. Although females live longer than males, females are allowed to retire earlier than males and at full benefits. Is there any thought of getting rid of this structure of retiring at 65 or 60, and what sort of political influences are preventing or encouraging the maintenance of a retirement age of 65?

MR. STROINSKI: Could I answer that from the eastern Europe perspective? As the first comment was about the political system in Chile, and I guess this same comment can be applied to Communist regimes, I would prefer not to discuss political issues. I would rather concentrate on the social development.

I think there is a certain difficulty in conducting reforms. Sometimes, easier solutions, which do not require parliamentary acceptance, are used as a patchwork to change the Social Security pension system. That is happening in Poland. Some minor changes, like limitations or delays in the indexation of the system, which are made to keep the system going. But the discussion of changing the retirement age has not really started. That would require a parliamentary decision, and you can see how unpopular that might be. It has been done, in the U.S. only because it was started well in advance. Because the discussion of the system is so widespread in Poland, any changes like that would be loudly protested. I would add that it is the least costly way of dealing with the pension system, as increasing the retirement age gives probably more net revenue than any other reform suggested.

MR. WALTER S. RUGLAND: I'd just like to follow up briefly on the issue that Krzysztof talked about, and that is, having the actuaries of the past come out of the woodwork and begin to practice and advise the eastern European countries again. The International Actuarial Association has worked hard on this, and as one of the delegates from the United States, Barry Watson has been involved with respect to that activity. The Society of Actuaries responded last summer to a request from the

IAA to help support an established fund, the goal of which was \$100,000 to provide sustenance support to individuals in developing countries who wish to get caught up or learn about the basics of actuarial science. The purpose of the fund is not to sponsor seminars, but to allow people to go who really want to participate. The Society's response to that request was to offer a matching grant of \$50,000 to that fund. The SOA said that other organizations around the world need to step up and put money on the table. For every dollar they put on the table, the SOA would put a dollar on the table. That has happened, and there is \$100,000 now in that fund, give or take a bit for currency fluctuations, all of which, I believe, are favorable to the fund so far. And so we're a player in this, and the actuaries of the developed world are now working together to see what we can do for the undeveloped world. Now, you may say that that's a lot of money, but I would just remind you that it's less than 20% of the budget for putting on this meeting here in San Diego. So, we do have a long way to go.

MR. WATSON: That's a very valid point. Just as another illustration, on a much lower financial level, the Tom McComb fund was set up by the Conference of Consulting Actuaries to purchase textbooks for the Polish program. All these efforts are valuable.

MR. DENWARD CHUNG: I have a question for Mr. Salazar about the nature of the minimum guaranteed pension in Chile. There's the 10% mandatory employee contribution, and then there's an optional 10% on top of that. How does that affect the minimum guarantee that will be provided at the end? Is that guarantee some function of how much the employee contributed, and is there some implicit guaranteed interest rate in that guarantee?

MR. SALAZAR: Do you mean the minimum yield?

MR. CHUNG: You said that there's a minimum pension, which guarantees a minimum subsistence benefit. It seems like the more you contribute, obviously, the less likely you're going to fall below subsistence.

MR. SALAZAR: A typical case is a contribution of 13.5%. Ten percent goes to savings. About 2% goes for fees, and 1.5% goes for life and disability coverage, funneled through the AFPs to an insurance company. The 10% savings will accumulate over the years to some amount. That amount will be annuitized when the individual retires and, depending on how much money there is in that fund and the age of the individual and so on, that will produce a monthly benefit. If the monthly benefit goes below a certain bench mark, the government makes up the difference.

MR. CHUNG: But you said there's also an additional, optional 10% employee contribution. If I were to contribute that optional 10%, I would be less likely to require the government subsidy.

MR. SALAZAR: Yes.

MR. CHUNG: So is that minimum amount somehow a function of what you contributed? If I contributed twice as much as you did, would my guarantee be twice as much as your guarantee?

MR. SALAZAR: No, the minimum guarantee is fixed by the government as a multiple of some benchmark level.

MR. CHUNG: So it's a minimum income guarantee, not a minimum investment guarantee.

MR. SALAZAR: That's right.

MR. CHUNG: That could be an incentive against contributing additional amounts.

MR. SALAZAR: Why?

MR. CHUNG: Because if I contribute 11%, I might get the same minimum benefit as somebody else who's contributed 10%.

MR. SALAZAR: Yes, the guarantee is the same for everybody. And, like here in the U.S., it is designed to cover people who fall below the poverty line.

MR. WATSON: It's a floor of income. It's not meant to be a minimum return on your money. It's designed so that you can never get less than so much, so that you won't be starving. But I think this does illustrate the problems that you have in a system in which there is a substantial old or retired population. Chile, like some other Latin American countries, is fortunate in that it does not have a huge pool of people who need money now. And the minimums and guarantees are aimed at meeting this need. They're aimed at trying to make sure that enough money has been put into the fund.

MR. THOMAS L. LUCERO: I find it interesting that the one country that seems to have a pension fund that's funded, probably at least 75 cents on the dollar, is one that had to go through an extreme disturbance such as Allende and a Pinochet, whereas the U.S. Social Security fund is probably funded at three cents on the dollar. So I'm wondering if, 50 years down the road, Chile will be telling us how we can reform our system when we're all living on the return of our three cents on the dollar. This is more a comment than a question.

MR. SALAZAR: I have a question for you, based on your comment. How do you arrive at the 75 cents on the dollar in Chile, and the three cents on the dollar in the U.S.?

MR. LUCERO: I think the U.S. Social Security fund is on the order of \$300 billion, with liabilities on the order of \$10 trillion. And, you're saying about half of the people in Chile are going to be funded in full, so that's 50% of people who are funded 100 cents on the dollar, and I just assumed the other half would be funded at 50 cents on the dollar.

MR. SALAZAR: I see. Actually, some critics are saying that they're probably not going to be funded at that high a level. Some of the critics of the system are now saying that these individuals are not going to receive enough money, based on what they contributed. The 75 cents on the dollar might be optimistic, according to these critics.

MR. LUCERO: It could be, but it's still clearly better than the three cents on the dollar that we have.

MR. STEELE R. STEWART: With respect to the Chilean system, I have a question about the projections of the percentages of people who probably will be below the minimum threshold, and those people who are in the middle. On average, what is their retirement income going to be like, as compared to their earning income? Have any such projections been made?

MR. SALAZAR: There is plenty of statistical information on what the system is doing and on what the projections are. I don't have it here with me, but I can point you to a source for all that information. The Superintendent of AFPs produces, on a quarterly basis, a manual that is about two inches thick. Every question you can possibly think of is answered in there, including projections. The system now equates to 40% of GNP in Chile, and it's expected that by the year 2000, if it continues growing at the rate it is growing, it's going to be worth 90% of the GNP. So it's absorbing Chile's economic machine quite rapidly.