The Chilean model

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In 1981, Chile replaced its government-run pay-as-you-go pension system with a national system of individual Pension Savings Accounts managed by the private sector. The new system has contributed to the increase in the country's savings rate, the productivity of capital and the rate of economic growth. More important, Chilean workers now have property rights over their own pension contributions and enjoy much higher pensions than under the old system.

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Introduction

A spectre is haunting the world. It is the spectre of bankrupt state-run pension systems. The pay-as-you-go pension system that has reigned supreme through most of this century has a fundamental flaw, one rooted in a false conception of how human beings behave: it destroys, at the individual level, the essential link between effort and reward – in other words, between personal responsibilities and personal rights. Whenever that happens on a massive scale and for a long period of time, the result is disaster.

Two exogenous factors aggravate the results of that flaw: the global demographic trend toward decreasing fertility rates; and medical advances that are lengthening life. As a result, fewer and fewer workers are supporting more and more retirees. Since the raising of both the retirement age and payroll taxes has an upper limit, sooner or later the system has to reduce the promised benefits, a tell-tale sign of a bankrupt system. Whether this reduction of benefits is done through inflation or through legislation, the final result for the retired worker is the same: anguish in old age created, paradoxically, by the inherent insecurity of the 'social security' system.

In Chile we faced similar problems with our social security system in the late 1970s. So in 1980, we decided to replace completely our pay-as-you-go system with a new one based on individually owned, privately invested accounts. Seven other Latin American countries have already followed the Chilean model. In recent years, Peru (1993), Argentina (1994), Colombia (1994), Uruguay (1995), and Mexico, Bolivia and El Salvador (1997) undertook a similar reform.

Nations all over the world are actively considering reforming their public pension systems along the lines of the Chilean model.

The Chilean Pension Savings Accounts (PSA) system

Chile established a pay-as-you-go social security system in 1925, the first country in the western hemisphere to do so. Over time, special-interest politics led to the creation of dozens of different pension regimes, which weakened even more the link between effort and reward. By the late 1970s, contribution rates had increased to more than 20% of total payroll, although the benefits for most pensioners remained low. In fact, about 70% of pensioners were receiving the minimum pension in 1979. In addition, increases in life expectancy meant that by 1979 there were only 2.5 active workers per retiree. The pension system, with a deficit equivalent to 2.6% of GDP by the late 1970s, was financially and morally bankrupt. In 1980, Chile approved a law (D.L. 3500) to replace fully the government-run pay-as-you-go pension system with a privately administered, national system of Pension Savings Accounts (PSAs).

The new system began to operate on 1 May 1981 (Labour Day in Chile). After 17 years of operation, the results speak for themselves. Pensions in the new private system already are 50–100% higher – depending on whether they are old-age, disability, or survivor pensions – than they were in the pay-as-you-go system. The resources administered by the private pension funds amount to around 42% of Chile's GNP. By improving the functioning of both the capital and the labour markets, pension privatisation has been one of the key initiatives that, in conjunction with other free-market oriented structural reforms, has pushed the growth rate of the economy upwards from the historical 3% a year to 7% during the last 12 years.

In a recent work, UCLA Professor Sebastian Edwards has stated that, 'The [Chilean] pension reform has had important effects on the overall functioning of the economy. Perhaps one of the most important effects is that it has contributed to the phenomenal increase in the country's saving rate, from less than 10% in 1986 to almost 29% in 1996' (Edwards, 1996, 26).[1] He goes on to say that, 'The pension reform has also had an important effect on the functioning of the labour market. First, by reducing the total rate of social security contributions it has reduced the cost of labour. Second, by relying on a capitalisation system, it has eliminated the labour tax component of the retirement system' (ibid., p. 27).

Under Chile's PSA system, what determines a worker's pension level is the amount of money he accumulates during his working years. Neither the worker nor the employer pays a social security tax to the state. Nor does the worker collect a government-funded pension. Instead, during his working life, he automatically has 10% of his wages deposited by his employer each month in his own, individual PSA. This percentage applies only to the first $22,000 of annual income. Therefore, as wages go up with economic growth, the 'mandatory savings' content of the pension system goes down.

A worker may contribute an additional 10% of his wages each month, which is also deductible from taxable income, as a form of voluntary savings. Generally a worker will contribute more than 10%

of his salary if he wants to retire early or obtain a higher pension.

A worker chooses one of the private pension fund administration companies ('Administradoras de Fondos de Pensiones,' AFPs) to manage his PSA. These companies can engage in no other activities and are subject to government regulation intended to guarantee a diversified and low-risk portfolio and to prevent theft or fraud. A separate government entity, a highly technical 'AFP Superintendency,' provides oversight. Of course, there is free entry to the AFP industry.

Each AFP operates the equivalent of a mutual fund that invests in stocks and bonds. Investment decisions are made by the AFP. Government regulation sets only maximum percentage limits both for specific types of instruments and for the overall mix of the portfolio; and the spirit of the reform is that those regulations should be reduced constantly with the passage of time and as the AFP companies gain experience. There is no obligation whatsoever to invest in government or any other type of bonds. Legally, the AFP company and the mutual fund that it administers are two separate entities. Thus, should an AFP go under, the assets of the mutual fund – that is, the workers' investments – are not affected.

Workers are free to change from one AFP company to another. For this reason there is competition among the companies to provide a higher return on investment, better customer service or a lower commission. Each worker is given a PSA passbook and every three months receives a statement informing him how much money has been accumulated in his retirement account and how well his investment fund has performed. The account bears the worker's name, is his property, and will be used to pay his old-age pension (with a provision for survivors' benefits).

As should be expected, individual preferences about old age differ as much as any other preferences. Some people want to work forever; others cannot wait to cease working and to indulge in their true vocations or hobbies, like writing or fishing. The old, pay-as-you-go system did not permit the satisfaction of such preferences, except through collective pressure to have, for example, an early retirement age for powerful political constituencies. It was a one-size-fits-all scheme that exacted a price in human happiness.

The PSA system, on the other hand, allows for individual preferences to be translated into individual decisions that will produce the desired outcome. In the branch offices of many AFPs there are user-friendly computer terminals that permit the worker to calculate the expected value of his future pension, based on the money in his account, and the year in which he wishes to retire. Alternatively, the worker can specify the pension amount he hopes to receive and ask the computer how much he must deposit each month if he wants to retire at a given age. Once he gets the answer, he simply asks his employer to withdraw that new percentage from his salary. Of course, he can adjust that figure as time goes on, depending on the actual yield of his pension fund. The bottom line is that a worker can determine his desired pension and retirement age in the same way one can order a tailor-made suit.

The Chilean PSA system includes both private and public-sector employees. The only ones excluded are members of the police and armed forces, whose pension systems, as in other countries, are built into their pay and working conditions system. (In my opinion – but not theirs yet – they would also be better off with a PSA.) All other employed workers must have a PSA.

A worker who has contributed for at least 20 years but whose pension fund, upon reaching retirement age, is below the legally defined 'minimum pension' receives that pension from the state once his PSA has been depleted. What should be stressed here is that no one is defined as 'poor' *a priori*. Only *a posteriori*, after his working life has ended and his PSA has been depleted, does a poor pensioner receive a government subsidy. (Those without 20 years of contributions can apply for a welfare-type pension at a much lower level.)

The PSA system also includes insurance against premature death and disability. Each AFP provides this service to its clients by taking out group life and disability coverage from private life-insurance companies. This coverage is paid for by an additional worker contribution of around 2.9% of salary, which includes the commission to the AFP.

The mandatory minimum savings level of 10% was calculated on the assumption of a 4% average net yield during the whole working life, so that the typical worker would have sufficient money in his PSA to fund a pension equal to 70% of his final salary.

Upon retiring, a worker may choose from two general pay-out options. In one case, a retiree may use the capital in his PSA to purchase an annuity from any private life-insurance company. The annuity guarantees a constant monthly income for life,

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indexed to inflation (there are indexed bonds available in the Chilean capital market so that companies can invest accordingly), plus survivors' benefits for the worker's dependants. Alternatively, a retiree may leave his funds in the PSA and make programmed withdrawals, subject to limits based on the life expectancy of the retiree and his dependants. In the latter case, if he dies, the remaining funds in his account form a part of his estate. In both cases, he can withdraw as a lump-sum the capital in excess of that needed to obtain an annuity or programmed withdrawal equal to 70% of his last wages.

The PSA system solves the typical problem of pay-as-you-go systems with respect to labour demographics: in an ageing population the number of workers per retiree decreases. Under the PSA system, the working population does not pay for the retired population. Thus, in contrast with the pay-as-you-go system, the potential for inter-generational conflict and eventual bankruptcy is avoided. The problem that many countries face – unfunded pension liabilities – does not exist under the PSA system.

In contrast to company-based private pension systems that generally impose costs on workers who leave before a given number of years, the PSA system is completely independent of the company employing the worker. Since the PSA is tied to the worker, not the company, the account is fully portable. Given that the pension funds must be invested in tradable securities, the PSA has a daily value and therefore is easy to transfer from one AFP to another. The problem of 'job lock' is entirely avoided. By not impinging on labour mobility, both inside a country and internationally, the PSA system helps create labour-market flexibility and neither subsidises nor penalises immigrants.

A PSA system is also much more efficient in promoting a flexible labour market. In fact, people are increasingly deciding to work only a few hours a day or to interrupt their working lives – especially women and young people. In pay-as-you-go systems, those flexible working styles create the problem of filling the gaps in contributions. Not so in a PSA scheme where stop-and-go contributions are no problem whatsoever.

The transition

One challenge is to determine an appropriate retirement pension system. Another challenge, in countries that already have a pay-as-you-go system, is to manage the transition to an appropriate retirement pension system. The transition has to take into account the particular characteristics of each country, of course, especially constraints imposed by the budget situation.

In Chile we set three basic rules for the transition:

1. The government guaranteed those already receiving a pension that their pensions would be unaffected by the reform. This rule was important because the social security authority would obviously cease to receive the contributions from the workers who moved to the new system. Therefore the authority would be unable to continue paying pensioners with its own resources. Moreover, it would be unfair to the elderly to change their benefits or expectations at this point in their lives.
2. Every worker already contributing to the pay-as-you-go system was given the choice of staying in that system or moving to the new PSA system. Those who left the old system were given a 'recognition bond' that was deposited in their new PSAs. (The bond was indexed and carried a 4% real interest rate.) The government redeems the bond only when the worker reaches the legal retirement age. The bonds are traded in secondary markets, so as to allow them to be used for early retirement. This bond reflected the rights the worker had already acquired in the pay-as-you-go system. Thus, a worker who had made pension contributions for many years received recognition for that when he entered the new system.
3. All new entrants to the labour force were required to enter the PSA system. The door was closed to the pay-as-you-go system because it was unsustainable. This requirement assured the complete end of the old system once the last worker who remained in it reaches retirement. This rule is important because the most effective way to reduce the size of the government in our lives is to end programmes completely, not simply scale them back so that a new government might revive them at a later date.

Together with the creation of the new AFP system, all gross wages were redefined to include most of the employer's contribution to the old pension system. (The rest of the employer's contribution was turned into a transitory tax on the use of labour to help the financing of the transition; once that tax was completely phased out, as established in the pension reform law, the cost to the employer of hiring workers decreased.) The worker's contribution was deducted from the increased gross wage. Because the total contribution was lower in the new system than in the old, net salaries for those who moved to the new system increased by around 5%.

In that way, we ended the illusion that both the employer and the worker contribute to social security, a device that allows political manipulation of those rates. From economic theory, we know that all contributions are ultimately paid from the worker's marginal productivity, and employers must take into account all labour costs – whether termed salary or social security contributions – in making their hiring and pay decisions. By renaming the employer's contribution, the system makes it evident that all contributions are made by the worker. In this scenario, of course, the final wage level is determined by the interplay of market forces.

The financing of the transition is a complex technical issue and each country must address this problem according to its own circumstances. The implicit pay-as-you-go debt of the Chilean system in 1980 has been estimated at around 80% of GDP. (The value of that debt had been reduced by a reform of the old system in 1978, especially by the rationalisation of indexing, the elimination of special regimes and the raising of the retirement age.)

A recent World Bank study (1994, p. 268) stated that 'Chile shows that a country with a reasonably competitive banking system, a well-functioning debt market, and a fair degree of macro-economic stability can finance large transition deficits without large interest rate repercussions.'[2]

Chile used five methods to finance the short-run fiscal costs of changing to a PSA system:

1. Since the contribution needed in a capitalisation system to finance adequate pension levels is generally lower than the current payroll taxes, a fraction of the difference between them can be used as a temporary transition tax without reducing net wages or increasing the cost of labour to the employer.
2. Using debt, the transition cost can be shared by future generations. In Chile roughly 40% of the cost has been financed issuing government bonds at market rates of interest. These bonds havebeen bought mainly by the AFPs as part of their investment portfolios and that 'bridge debt' should be completely redeemed when the pensioners of the old system are no longer with us.
3. The need to finance the transition was a powerful incentive to reduce wasteful government spending. For years, the budget director has been able to use this argument to kill unjustified new spending or to reduce wasteful government programmes.
4. The increased economic growth that the PSA system promoted substantially increased tax revenues, especially those from the value-added tax. Less than 15 years after the pension reform, Chile was already running fiscal budget surpluses.
5. In the state's balance sheet (in which each government should show its assets and liabilities), state pension obligations were offset to some extent by the value of state-owned enterprises and other types of assets. Therefore privatisation was not only one way to finance the transition but had additional benefits such as increasing efficiency, spreading ownership and depoliticising the economy.

The results

The PSAs have already accumulated an investment fund of $30 billion, an unusually large pool of internally generated capital for a developing country of 14 million people and a GDP of $70 billion.

This long-term investment capital has not only helped fund economic growth but has spurred the development of efficient financial markets and institutions. The decision to create the PSA system first, and then privatise the large state-owned companies second, resulted in a 'virtuous sequence.' It gave workers the possibility of benefiting handsomely from the enormous increase in productivity of the privatised companies by allowing workers, through higher stock prices that increased the yield of their PSAs, to capture a large share of the wealth created by the privatisation process.

One of the key results of the new system has been to increase the productivity of capital and thus the rate of economic growth in the Chilean economy. The PSA system has made the capital market more efficient. The vast resources administered by the AFPs have encouraged the creation of new kinds of financial instruments while enhancing others already in existence, but not fully developed. Another of Chile's pension-reform contributions to the sound operation and transparency of the capital market has been the creation of a domestic risk-rating industry and the improvement of corporate governance.

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Since the system began to operate on 1 May 1981, the average real return on investment has been 12% per year (more than three times higher than the anticipated yield of 4%). Of course, the annual yield has shown the oscillations that are intrinsic to the free market – ranging from –3% to 30% in real terms – but the important yield is the average one over the long term.

Pensions under the new system have been significantly higher than under the old, state-administered system. According to a study by Sergio Baeza (1995), the average AFP retiree is receiving a pension equal to 78% of his mean annual income over the previous ten years of his working life.[3] As mentioned, upon retirement workers may withdraw in a lump sum their 'excess savings' (above the 70% of salary threshold). If that money were included in calculating the value of the pension, the total value would come close to 84% of working income. Recipients of disability pensions also receive, on average, 70% of their working income.

The new system also has eliminated the unfairness of the old system. According to conventional wisdom, pay-as-you-go pension schemes redistribute income from the rich to the poor. However, recent studies have shown that once certain income-specific characteristics of workers and of the operation of the political system are taken into account, public schemes generally redistribute income to the rich – and especially to the most powerful groups of workers.

Conclusion

It is not surprising that the PSA system in Chile has proved so popular and has helped promote social and economic stability. Workers appreciate the fairness of the system and they have obtained through their pension accounts a direct and visible stake in the economy. Private pension funds own a sizeable fraction of the shares of the biggest companies of Chile. Workers therefore share in future prosperity and investment growth.

When the PSA system was inaugurated in Chile in 1981, workers were given the choice of entering the new system or remaining in the old one. Half a million Chilean workers (one fourth of the eligible workforce) chose the new system by joining in the first month of operation alone – far more than the 50,000 that had been expected. Today, more than 90% of Chilean workers are in the new system. That means that 5 million Chileans have PSA accounts, although not all belonged to active, full-time workers, and therefore not all contribute in any given month.

The bottom line is that when given a choice, workers vote with their money overwhelmingly for the free market – even when it comes to such 'sacred cows' as social security.

As the state pension system disappears, politicians will no longer decide whether pensions need to be increased and in what amount or for which groups. Thus, pensions are no longer a key source of political conflict and election-time demagoguery as they once were. A person's retirement income will depend on his own work and contributions and on the success of the economy, not on the government or on the pressures brought by special interest groups. Nevertheless, there are safeguards which allow redistribution of income in retirement to the poor.

For Chileans, PSAs now represent real and visible property rights – they are the primary sources of security for retirement. After 17 years of operation of the new system, in fact, the typical Chilean worker's main asset is not his used car or even his small house (probably still mortgaged), but the capital in his PSA.

Finally, the private pension system has had a very important political and cultural consequence. The overwhelming majority of Chilean workers who chose to move into the new system moved into it faster than Germans going from East to West after the fall of the Berlin Wall. Those workers freely decided to abandon the state system even though some of the national trade-union leaders and the old political class advised against it. Workers care deeply about matters close to their lives, such as pensions, education and health, and make their decisions thinking about their families and not according to political fashions. Indeed, the new pension system gives Chileans a personal stake in the economy. A typical Chilean worker is not indifferent to the behaviour of the stock market or interest rates. Intuitively he knows that a bad minister of finance can reduce the value of his pension rights. When workers feel that they own a part of the country, not through party bosses or a Politburo, they are much more attached to the free market and a free society.

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