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Briefing Paper

Defined Contributions from Workers, Guaranteed Benefits for Bankers:

The World Bank's Approach to Social Security Reform

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EXECUTIVE SUMMARY

In the last decade the World Bank has actively promoted the partial or complete replacement of public Social Security systems with systems of individual accounts. While proponents of such accounts had originally hoped that they would boost growth by increasing national saving, the evidence to date has convinced even most advocates of individual accounts that the net effect on national saving will be minimal.

However, the increase in the government deficit, due to the loss of Social Security tax revenues during a transition period, can lead to serious financial problems. In the case of Argentina, the current budget crisis can be attributed largely to the decision to privatize its Social Security system. The lost tax revenue, plus the interest resulting from the additional incurred expenditure, exceeded its central government budget deficit in 2001. In other words, if Argentina had not privatized it Social Security system in 1994, and done everything else exactly the same, it would have run a budget surplus in 2001.

This paper compares the administrative costs associated with individual accounts, measured as a share of contributions to the system, with the costs of operating an efficient public Social Security system like the one in the United States.

Among the findings:

1) According to data from the World Bank, the administrative cost of running privatized systems of individual accounts is between ten and fifty times as much as the administrative cost of running the public Social Security system in the United States. These additional fees are direct transfers from workers' retirement income to the financial sector.

2) According to data from the World Bank, the cost of the running the public agency that supervises the operation of a system of individual accounts (the equivalent of a Securities and Exchange Commission for these accounts), is between 62 percent and 400 percent of the administrative cost of running the entire Social Security system in the United States. In most countries, the cost of running this oversight body is far greater than the cost of actually running the whole Social Security system in the United States.

3) The cost of converting funds accumulated in individual accounts into an annuity that provides a lifetime stream of earnings is between 11 and 22 times the cost of operating the Social Security system in the United States. These fees are direct transfers from workers' retirement income to the financial sector.

4) Proponents of individual accounts have failed to consider the opportunity cost to workers, in the form of the time needed to oversee their accounts. If the time required to manage these accounts is equal to half an hour per year, the opportunity costs would be between 55 percent and 280 percent of the administrative costs of the Social Security system in the United States.

INTRODUCTION

Over the last decade, more than a dozen countries in Latin America and Central and Eastern Europe have partially or completely replaced public defined benefit pension systems with defined contribution systems managed by private financial institutions. Many other nations are considering partial or complete privatization of their pension systems. The World Bank has been a major catalyst for this shift, providing loans and technical support. The track record of these reforms to date is not promising. The new programs have incurred substantial administrative costs, which come directly out of workers' retirement income, and accrue largely to the financial industry. Even in an optimistic scenario, these privatized systems will cost several hundred percent more to administer than a typical public system.

The shift from a public system to a system of private accounts also implies a loss of tax revenue, as money that had been paid into the public system is diverted into private accounts. The size of this loss will depend on how large a portion of current tax revenue is diverted, but it can be substantial. For example, in the case of Chile the revenue loss was about 8 percent of GDP in the years immediately following the reform (Acuna and Iglesias 2001). In developing nations, with limited ability to collect taxes and poor credit ratings, a revenue loss of this magnitude can have serious consequences. It can force major cuts in essential public services and/or contribute to the sort of financial crisis recently experienced by Argentina. This is a serious risk that appears to have been underestimated by the World Bank in its advocacy of privatization.

ACCOUNTING ILLUSIONS

Before assessing the administrative costs of private accounts, it is worth briefly dispelling an illusion about the potential for higher returns in private accounts relative to a traditional pay-as-you-go defined benefit system. Typically, stocks have offered a higher rate of return than the government bonds that are usually held as assets by government run programs. For example, in the United States, annual returns on stocks have averaged 4.0 percentage points higher than returns on government bonds. This difference is often seen as a way to increase the rate of return

to individual workers—by investing their money in stocks through individual accounts, as opposed to government bonds held by a central fund.

While this switch may lead to higher returns, it is important to recognize that the additional returns are simply transfers from elsewhere, not new wealth for the nation as a whole. Unless the switch to private accounts significantly increased savings, a possibility that few economists regard as likely, then the nation as a whole is no wealthier as a result of the switch to private accounts. This means that if the returns to retirees are higher, then someone else must be getting less.

There are two obvious sources for the additional returns from private accounts. The first is the increased interest payments that the government is likely to incur, as a result of the fact that money that had been designated to purchase government bonds is instead being used to buy stocks. In order to attract alternative purchasers on government bonds, it will be necessary for the government to pay a higher rate of interest on all of its bonds. Since the switch to private accounts raises the amount of interest that the government pays on its debt, it can be viewed as a transfer from general government revenue to the private accounts.

The second source of the additional returns on the individual accounts is a lower return on stocks in the period after the creation of private accounts. As more money flows into stocks, the returns to future purchasers of stocks will be lower. This will be due to the fact that the inflow of new funds can be expected to push up the ratio of stock prices to earnings, and therefore reduce the ratio of the dividend payout to the share price.[2] Since the switch to private accounts will lower the future returns to other holders of stock, it can be viewed as a tax increase on the holding of stock.

If it is considered desirable to raise the returns to retirees on the money they pay into a national Social Security system, then this can be accomplished without incurring the administrative costs associated with administering private accounts. Instead of incurring additional interest costs on its outstanding debt, this money could just be paid directly from general revenue into the Social Security system. From the standpoint of the national budget, there is no difference if the government incurs higher costs due to higher interest rates on its debt or due to additional payments to the Social Security system.

Similarly, it is possible to raise the tax rate on income from stocks as an alternative to depressing returns through the creation of private accounts. Holders of stock will end up no worse in this scenario, since their return—net of taxes—will be the same regardless of whether yields fall due to a rise in share prices, or whether after-tax returns are lowered due to higher tax rates.[3]

[2] Firms typically pay out a fixed percentage of their profits as dividends or use this money to buy back shares. If the share price rises, then this payout is smaller as a percentage of the share price.

[3] It is worth noting that there will be a one-time capital gain to current holders of stock at the time when privatization is put in place, as the price to earnings ratio rises to a permanently higher level. For many shareholders this windfall will be at least partially offset by a capital loss due to the decline in bond prices associated with higher interest rates on government bonds.

By tapping these sources of revenue to increase the rate of return to the Social Security system, the drain on the government and holders of stock would be exactly the same as if it had switched to a system of private accounts.[4] The only difference would be the savings in administrative costs.

THE COSTS OF PRIVATE ACCOUNTS

The experience of developing nations in administering national systems of private accounts, combined with evidence on the costs of defined contribution pension plans in the United States, clearly shows that even the best-managed systems of private accounts will cost several times as much to administer as a well-run public system.[5] These costs take four forms:

1) the direct administrative fees charged for managing and maintaining the accounts,
2) the cost of purchasing annuities after retirement, for workers who want to be assured of a lifetime income flow,
3) the costs of maintaining an oversight agency to ensure the proper management of these accounts, and
4) the time required by workers to oversee their own accounts.

There is a significant literature devoted to the first two types of costs, which are the largest costs associated with private accounts. The latter two costs have been less widely researched, but each one, individually, could be as large as the cost of operating an efficient public sector system.

Direct Administrative Fees

The direct administrative costs of private accounts vary substantially across nations. The table below shows the range of costs (measured as a percentage of annual contributions) for a representative group of nations. It also shows the administrative costs of the Social Security system in the United States, which is taken as a model of an efficiently run public system. While some nations have been more successful than others in restraining the costs of private accounts, even Bolivia, the lowest cost country, still pays fees that (measured as a share of contributions) are more than ten times the expense of running the entire United States system.

[4] On accounts, see James, Smalhout, and Vittas 1999; on annuities, see Mitchell, Poterba, and Warshawsky 1997.
[5] See United States Department of Labor 1998.

Table 1—Administrative Costs as a Percent of Annual Contributions

	Net Fees/Contributions[6]
Argentina	23.0%
Bolivia	4.8%
Columbia	14.1%
Chile	15.6%
El Salvador	19.0%
Mexico	22.1%
Uruguay	14.3%
United States	0.5%

Source: James, Smalhout, and Vittas 1999, table1; and Social Security Trustees Report 2000, table IV.A.1.

It is important to recognize that the fees for the private systems shown in the table understate the actual size of the transfers from workers to the financial sector each year, because they exclude brokerage fees and commissions which are charged to the firms that manage the accounts (e.g. spreads on stock trades). These fees are deducted directly from the returns on the accounts. While such fees are likely to be small relative to the fees charged for managing the accounts, they are likely to still be substantial relative to the cost of administering a well-run public system, especially for actively traded funds. For example, in the case of Argentina, if these trading fees were equal to just 0.05 percent of the value of the assets in the accounts, it would raise the administrative costs by an amount equal to approximately 1.0 percent of annual contributions. This is more than twice the entire cost of administering the United States system. A full measure of the drain on workers' savings, and the economic resources used to maintain a system of private accounts, should include these trading fees.

Annuities

The second well-documented cost associated with systems of individual accounts is the cost of issuing annuities for workers at the point that they start collecting benefits. There has been considerable research on the cost of annuities in the United States, which generally finds that workers must accept a benefit that is 15-20 percent below an actuarially fair payment (Mitchell et al 1997). A significant portion of this payment, usually estimated at approximately 10 percentage points, is attributable to adverse selection. This is a result of the fact that in a system in which annuities are voluntary, the subset of people who opt to buy an annuity are likely to be longer-lived than the average for the population as a whole. To compensate for the longer average lifespan of the people who buy annuities, insurance companies pay lower annual benefits than if annuity buyers were typical of the population as a whole.

[6] These fees exclude expenses associated with disability or survivor insurance, except in the case of the United States, for which the fees include the cost of administering the survivors' insurance portion of the program.

But the loss that workers incur due to adverse selection—while it does mean that the system is functioning more poorly in meeting the goal of providing a secure retirement income—is a transfer between groups of workers. By contrast, the fees charged by insurance companies to issue annuities are direct transfers from workers to the financial industry. These fees correspond to the use of real resources (labor and capital) to research and administer the annuity system. In a traditional defined benefit system, in which the old-age benefits take the form of an annuity (adjusted for inflation, in most cases), these costs are unnecessary. Therefore the 5-10 percent of savings, which are assessed as a fee when an annuity is issued and are attributable to actual costs incurred by insurers, can be added to the expense of operating systems of private accounts.

Costs of Supervisory Agencies

The third cost of maintaining a system of private accounts is the cost of operating the supervisory agency that oversees the accounts. This is the agency that must protect workers against fraud or bad management practices, and prevent workers from holding assets that are excessively risky. The cost of running these agencies has proven to be relatively small compared to the direct administrative expenses of individual accounts, but it is not small relative to the cost of a well-run public sector system. The table below shows the cost of operating the supervisory agencies, relative to annual contributions. The total administrative cost of the United States Social Security system is included at the bottom to provide a basis of comparison. While these costs are far lower than the direct administrative fees charged to workers, they are still quite large relative to the entire cost of administering the Social Security system in the United States. The administrative costs of operating the oversight system in Chile, the most efficient of the group, measured relative to contributions, is 62 percent of the entire cost of administering the Social Security system in the United States. Bolivia, the country with the most inefficient system, pays four times as much to operate its oversight system, as the United States pays to administer its whole Social Security system.

Table 2—Expense of Supervisory Agencies for Overseeing Individual Accounts Compared With Total Administrative Costs in the United States

	Annual Costs/Contributions[7]
Argentina	0.36%
Bolivia	1.80%
Chile	0.28%
Mexico	0.95%
Peru	1.23%
U.S. (total administrative cost)	0.45%

Source: Demarco and Rofman 1998, table3; and Social Security Trustees Report 2000, table IV.A.1

[7] These fees exclude expenses associated with disability or survivor insurance, except in the case of the United States, for which the fees include the cost of administering the survivors' insurance portion of the program.

The Opportunity Cost of Workers' Time

A significant cost associated with individual accounts, which has been largely neglected in the literature on the issue, is the opportunity cost of the time required by workers to manage their accounts. Since this issue has been almost completely neglected by the World Bank and other proponents of individual accounts, there is little basis for estimating this cost. However, even if the time involved in managing these accounts is very limited, it would still be substantial compared to the administrative costs of a well-run defined benefit system. For example, if a worker spent half an hour a year overseeing his or her account on average, this would be equal to 0.25 percent of the annual contributions in a large scale privatized system and more than 1.0 percent of the annual contributions in a partial privatization plan—similar to ones often suggested for the United States.[8]

It is surprising that the opportunity costs of workers' time have been largely ignored in discussing the relative merits of individual accounts and defined benefit systems. Defined benefit systems generally make no demands on workers' time between the period when they first register and the point at which they arrange to start receiving benefits. Therefore the time that workers spend managing individual accounts—and therefore not caring for their children, going to school, or engaging in some type of leisure activity —should be viewed as an additional cost of individual accounts. Ignoring this cost would be comparable to advocating a new type of car without considering the time that drivers had to spend maintaining it.

One piece of evidence suggesting that the time involved in overseeing these accounts may be substantial is the recent decision of the Chilean government to start offering "benefits awareness" courses in school, so that workers will be better prepared to manage their accounts. A recent World Bank study recommended that the other countries in Latin America with individual account systems follow Chile's example (Devesa-Carpio and Vidal Melia 2001, p 26). This means that students will forego time spent learning math, language, or other skills in order to learn about the country's public pension system. While learning these financial skills may offer students other benefits, it is not obvious that it is the best use of their time.

The Total Costs of Individual Accounts

The discussion above indicates that systems of individual accounts impose a substantially greater economic drain on society than a well-run defined benefit system. In other words, they divert resources, in the form of labor and capital, which could be used productively elsewhere. Most of these resources, such as management and annuity fees, are income to the financial sector. Table 3 summarizes the costs of operating a defined contribution system measured as a share of

[8] If a typical worker spends 2000 hours a year on the job and pays a total of 10 percent of their wages into a system of accounts, then their annual contribution is equal to 200 hours of wages. If they have to spend half an hour managing their accounts, then this is 0.25 percent of the time they spent working to earn the money contributed to their accounts. If the contribution rate is 2.0 percent of wages, then this would be equivalent to 40 hours for a full-time full year worker and the half hour spent on management is 1.25 percent of their annual contribution.

contributions. This table shows that even when using the low cost estimates, it is far more expensive to run a defined contribution pension system than a defined benefit plan. The low cost estimate is approximately 2300 percent of the cost of operating the defined benefit system in the United States. The high cost estimate implies that the operational expenses of a defined contribution system is approximately 70 times that of the United States. These expenses imply a serious drain of resources. If a mature system has contributions equal to 6 percent of GDP, the low cost estimate implies that the amount of waste, compared with the cost of running a defined benefit system, is equal to approximately 0.6 percent of GDP annually. This would be equivalent to approximately $65 billion a year in the United States at present. The high cost estimate would imply a level of waste equal to 2.1 percent of GDP, which would be the equivalent of $230 billion a year in the United States.

Table 3—Operating Costs of Defined Contribution Pension Systems as a Share of Contributions

	Administrative Fees[9]	Oversight Agency[10]	Annuity Fees[11]	Opportunity Cost of Time[12]	Total
Low Estimate	4.8%	0.28%	5.0%	0.25%	10.33%
High Estimate	23.0%	1.80%	10.0%	1.0%	35.80%

Financing the Transition

The revenue lost due to the diversion of payroll taxes to individual accounts has long been recognized as a serious problem of switching to a defined contribution system. In the period immediately after the transition, the government's obligations to current retirees is largely unchanged, even though it no longer has as much payroll tax revenue to pay these benefits. This shortfall can be quite large. For example, in Chile it exceeded 8.0 percent of GDP in the early eighties. Some proponents of individual accounts have argued that this shortfall should not be viewed as increasing the government's debt, since it is just replacing implicit debt in the form of pension obligations with explicit debt owed by the government.[13]

[9] The low estimate is for Bolivia and the high estimate is for Argentina. Both are taken from James, Smalhout, and Vittas 1999, p 38.

[10] The low cost estimate is for Chile; the high cost estimate is for Bolivia. The estimates are taken from Demarco and Rofman 1998, table 3.

[11] These estimates are taken from research on the costs of annuities by Mitchell, Poterba, and Warshawsky 1997. They refer only to actual expenses, not additional costs associated with adverse selection.

[12] The low estimate assumes that workers spend an average of 0.5 hours annually on their accounts and that the annual contribution is equal to 200 hours of work (10 percent of 2000). The high end assumes that workers spend an average of 2 hours per year making decisions on their accounts.

[13] See Garcia-Mujica 1996.

Regardless of the theoretical merits of this argument, the recent experience of Argentina demonstrates that neither the financial markets, nor the I.M.F. accept it in practice.[14] According to the I.M.F., the transition costs of Argentina's Social Security privatization increased its budget deficit by an amount equal to approximately 1.0 percent of GDP (I.M.F. 1998). This shortfall, and the subsequent interest payments, fully accounted for Argentina's central government budget deficits in the three years prior to its financial collapse. However, the financial markets evidently focused on Argentina's current deficit and ignored the reduction in its long-term pension liabilities. The I.M.F. adopted a similar stance in setting a zero deficit budget target as a condition of new lending.[15]

In retrospect, it seems clear that the decision to privatize Argentina's Social Security system was a disaster, given the nation's precarious financial position. However, it should have been possible to recognize this problem before pushing Argentina down this path. Tax evasion by the wealthy in Argentina is not a new phenomenon, and it was not reasonable to believe that it would be qualitatively reduced at the time the privatization plan was put into effect in 1994. This meant that Argentina's government would be foregoing a large source of revenue with no obvious alternative replacement in sight.

Since most nations in the developing world do have chronic budget problems and pay extraordinarily high interest rates on their debt, the push to privatize Social Security and therefore forego substantial amounts of revenue seems very reckless. The waste of resources implied by privatization, outlined in the first section above, should provide further caution against going this route. In Argentina, the financial crisis that resulted in part from the deficit created by privatization has led to a general economic collapse and the collapse of the system of private accounts, which were seized by the government to pay its debt obligations.[16] Requiring workers to place their Social Security contributions in the private financial system may provide large benefits to bankers, but it is not evident how it helps anyone else.

[14] Nor, implicitly does the World Bank, since it generally defers to the I.M.F. in assessing a country's eligibility for non-project lending.

[15] If the I.M.F. was considering the impact of Social Security privatization in setting a zero deficit target, then it implies that the Fund would have set a target of a surplus equal to 1.0 percent of GDP if Argentina had not partially privatized its Social Security system.

[16] An account of this seizure can be found on the British Broadcasting Corporation's website [http://news.bbc.co.uk/hi/english/business/newsid_1696000/1696010.stm].

REFERENCES

Acuna, R. and A. Iglesias, 2001. "Chile's Pension Reform After 20 Years." Washington, DC: World Bank.

Demarco, G. and R. Rofman, 1998. "Supervising Mandatory Pension Funds: Issues and Challenges." Washington, D.C.: World Bank.

Devesa-Carpio, José, and Carlos Vidal-Meliá, 2001. "The Reformed Pension Systems in Latin America." Pension Reform Primer. Washington, DC: World Bank.

Garcia-Mujica, Jorge, 1996. "Fiscal Impact of Switching from a Pay as You Go to a Capitalization System," Washington, D.C.: World Bank.

International Monetary Fund, 1998. "Argentina: Recent Economic Developments." IMF Staff Country Report No. 98/38. Washington, DC: International Monetary Fund.

James, E., J. Smalhout, and D. Vittas, 1999. "Administrative Costs and the Organization of Individual Account Systems: A Comparative Perspective." Washington, DC: World Bank.

Mitchell, O., J. Poterba, and M. Warshawsky, 1997. "New Evidence on the Money's Worth of Individual Annuities." Working Paper # 6002, Cambridge, MA: National Bureau of Economic Research.

United States Department of Labor, 1998. "Study of 401(k) Plan Fees and Expenses." Washington, D.C.: Pension and Welfare Benefits Administration of the United States Department of Labor.

United States Social Security Administration, 2000. *2000 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*. Washington, DC: United States Social Security Administration.