# The World Bank's Approach and the Right Approach to Pension Reform

by

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## I. Introduction

In the last year and a half the world has witnessed a remarkable reduction in the valuation of asset prices in developing countries. Measured in dollars, stock values declined by roughly 30 percent in relatively well managed and politically stable emerging economies like Poland, and by roughly 75 percent in poorly managed and politically troubled economies like Indonesia. This international meltdown of financial markets provides both an occasion and argument for critiquing the World Bank's approach to pension reform. The reason is that exclusive or predominant investment in domestic asset markets is a central tenant of that approach and the source of a variety of equally misguided advice.

Although the World Bank will be the target of this prosecution, it's far from the only defendant. The Bank's approach has been endorsed, either explicitly or implicitly, by other major lending institutions, such as the International Monetary Fund, the Inter-American Development Bank, and the Asian Development Bank. Since the policies of these international lending institutions are strongly influenced by the U.S. Government as well as governments of other major donors, the blame for the World Bank's policies must be shared by these governments as well.

At the outset, it should be acknowledged that the World Bank does not speak with a single voice on pensions. It has neither a single pension policymaker nor a pension policymaking committee. Instead, its policy reflects the varied judgements of its country and research economists who mission together in differing configurations to work on particular countries. Moreover, the policies recommended for particular countries are not, at least on the surface, identical. For example, the World Bank has advocated Chilean-type pension privatization in certain countries and notional accounts in others.

Whatever their apparent and actual variety, the Bank's pension reforms reflect and emanate from a common and deeply flawed set of views about the goals and methods of reforming state pension programs. In promoting these views and pursuing these goals, the Bank has imperiled not only the pensions of the current and future elderly of those client countries that adopt its plans. It has also severely limited their prospects for fundamental economic reform.

To its credit, the Bank has been open to debating its pension policy in a variety of public forums, including an annual international workshop on pension reform that the Bank's Economic Development Institute and Harvard Institute for Economic Development jointly sponsor. The criticisms that have been raised by the author and others of Bank pension policy have generally been dismissed as theoretically correct, but politically naïve. Political naiveté refers here to the proposition that the politicians in the countries the Bank is assisting are precluded, because of political considerations, from pursuing first- or even second-best policies. Consequently, Bank economists feel justified in advocating what they, themselves, often acknowledge are third-best policies.

The lack of central coordination of pension policy at the Bank coupled with the lack of forceful and appropriate leadership by senior Bank management is, in large part, responsible for this sorry situation. The Bank economists who construct pension policies for particular countries are of too low a rank to risk advocating and enforcing a radically different approach than has been advocated and enforced by other collections of Bank economists for other countries. Moreover, the Bank's team approach to providing pension advice via multi-member missions, where the members must achieve consensus, is a prescription for perpetuating and calcifying particular approaches to reform no matter what their merits. The team approach not only stifles policy innovation, it penalizes policy dissent by casting the dissenter as a "non team-player."

In this regard, it's important to stress that "mission failure" is defined within the Bank as failure to make the loan rather than as failure to require appropriate policies as the quid-pro-quo for the loan. Consequently, attempts by mission team members to defend economic first principals can only be done at the risk of "jeopardizing" the mission.

These micro-level problems of mission control have macro-level counterparts. The Bank increasingly finds itself competing with other major lending institutions in providing particular countries with policy advice and financial assistance. In this setting, recipient countries find it easy to play the Bank off against other institutions, pointing out that they need to "ante up" if they want to be a "player." The concern that the Bank or similar institutions would have no presence in a particular developing country, particularly a large developing country, appears to override the concern with whether that presence is actually beneficial.

This critique begins by outlining the legitimate goals of pension reform and contrasting these goals with those of the World Bank's pension reform policy. Next, it describes the Bank's standard approach to pension reform. Finally, it offers an alternative pension reform policy entitled the Personal Security System, developed by the author and Jeffrey Sachs of Harvard University.

## II. The Legitimate Goals of Pension Reform

There are a number of legitimate goals of pension reform to which the Bank and this author would both subscribe. The area of disagreement involves how these goals should be achieved and the legitimacy of goals that go beyond those listed below.

### *Guaranteeing Adequate Income for Workers When they Retire*

This is the most important goal of pension reform. It is also the goal most endangered by the Bank's approach. The pension systems of numerous developing countries have been unmitigated disasters on this score, leaving millions of their current elderly in poverty and millions of their current workers worrying about their own wellbeing in retirement. The goal of guaranteeing workers' pensions does not mean that what workers receive in old age should be completely independent of all domestic or international outcomes. But it does mean that workers' pensions should not be subject to excessive risk, whether that risk is political or financial. The stipulation that workers' pensions be adequate means that they should replace a reasonable fraction of pre-retirement income; i.e., they should be consistent with lifetime consumption smoothing. So the adequacy of pension benefits is a relative, not an absolute concept.

There are two other critical aspects of guaranteeing adequate pensions for retirees. One is that the transactions costs that arise in delivering gross pension benefits be low. The other is that pension benefits be paid in the form of real annuities, so that retirees can neither run out of income nor suffer a real decline in their income if they live too long.

***Lowering tax rates on workers***

Workers in a host of developing countries face exorbitant average and marginal social insurance taxes. These taxes are high not because their nominal rates are high, but because their effective rates are high. Their effective rates are high for two reasons. First, benefits are generally not closely linked at the margin to contributions. Second, there is often very little likelihood that the additional benefits promised in exchange for additional contributions will actually be paid. Thus, lowering effective tax rates requires not just formally linking marginal benefits to marginal contributions, but also making sure these benefits will be paid with a very high probability. The payoff from lowering effective tax rates comes in the form of increased labor supply, a reduction in economic inefficiency – what economists call *excess burden* –, and increased participation by fringe workers in the formal sector.

***Helping to Achieve Intertemporal Fiscal Balance***

The long-term fiscal imbalances of many developing countries are inextricably intertwined with the long-term fiscal imbalances in their pension systems. The basic problem in these countries is that their governments are bankrupt in a present value sense --- they have committed to time-paths of pension payments, other social benefit payments, transfers, and debt service whose present value vastly exceeds the present values of their projected taxes. To cope with this imbalance, many of these countries effectively default on their pensions and other promises, including the wages they are paying government workers, by printing money and, thereby, reducing the real values of these payments. While this policy lets these governments pretend they are meeting their obligations, no one is being fooled. Meantime, the economy is being put at grave risk because the government is undermining the means of payment.

To keep the public from substituting into hard currencies and, thus, nullifying their remaining channel of finance, governments, as most recently demonstrated by Russia, ban the use of hard currencies. In so doing, they also, in effect, ban foreign investment – an act of pure economic suicide. Why? Because banning the use of hard currencies means that foreign investors will be paid (but not necessarily on time) the return on their investments in domestic currency whose real value is subject to enormous uncertainty. This uncertainty arises because no one knows the degree to which the government will, for whatever reason, choose to debase the currency.

Pension reform holds the prospect of redefining the government's obligations so that it can actually fulfill, rather than effectively renege on, its promises. Stated differently, it holds the promise of realigning the present value of government receipts and expenditures so that the government will no longer need to resort to printing money to pay its bills. But the only way to ensure that any particular reform produces this outcome is to evaluate the government's pre- and post-reform fiscal finances in present value. This can be done by establishing a set of generational accounts, as roughly 30 countries around the world have done or are doing, or, more simply, by comparing the present values of future tax revenues and expenditures (including debt service). Armed with such a framework, one can quickly see whether any particular pension reform under consideration will mitigate or exacerbate the government's *intertemporal budget gap*, defined as the excess, measured in present value, of projected future expenditures over projected future receipts. Reducing the government's intertemporal budget gap is a vital goal for pension reform because without the reform's contribution to fiscal solvency, it will be neither credible nor effective in delivering the benefits it promises.

The concern about the contribution of pension reform to overall fiscal solvency is often called the issue of *transition finance*. The key question concerning transition finance is whether during the transition to a new pension system, the reform provides enough sources of revenues to pay off, in present value, the benefit obligations that are recognized as part of phasing out the old system. Pension reforms generally redefine, in the downward direction, these obligations as well as the receipts to pay off these reduced obligations. Thus transition finance analysis, when properly done, simply asks how the reform is affecting the government's intertemporal budget gap; i.e., whether the present value difference between the government's future expenditures and receipts rises or falls.

## III. The World Bank's Pension Reform Goals

The World Bank certainly says that it shares the above goals. But its actions speak for themselves. These actions are guided by three additional goals that are fundamentally incompatible with the above set. These are fostering the development of 1) a capital market, including stock, bond, and mortgage markets, 2) a private pension industry, and 3) a private insurance industry. To achieve these ends, the Bank advocates that workers be forced to "save" by making contributions to domestic pension companies who will then use the funds to purchase domestic securities and domestic insurance products.

Now, in of themselves, these additional goals are fine aspirations. What country wouldn't want to have its own stock market, pension companies, and insurance industry? The problem is that the comparative advantage of Bolivia, Russia, Kazakhstan, and other Bank client countries is decidedly not in operating securities markets, running pension companies, or in providing insurance. In propounding these goals, the Bank not only advises its client countries to pursue their comparative disadvantages, it also coerces them to do so though the conditions it stipulates on its loans.

Countries like Kazakhstan, Bolivia, and Russia have much better things to do with their scarce resources. But instead of encouraging them to engage in free trade and to import the securities, pension administration, and insurance services they need, the Bank mandates that they turn a blind eye to reality – to the fact that there is an extraordinary efficient world securities market, pension industry, and insurance industry that awaits their beck and call.

The developed world produces the kinds of financial products a small developing country might produce, but at very much lower cost. It also produces financial products that a small developing country is simply unable to produce, namely financial products that involve international risk diversification and the exploitation of economies to scale. One of these products is an internationally diversified portfolio with extremely low transactions cost. Another is an annuity insurance contract with very low loads and the pricing of mortality risk based on reinsurance -- the ability of major insurance companies to hedge their risks via risk-sharing arrangements with other insurance companies. A third is pension administration that utilizes state-of-the-art computer technology developed at high cost because it would be used for a very large number of clients.

When confronted with their financial mercantilism, Bank economists utter four excuses: 1) a large share of the pension assets arising from pension reforms need to be invested at home to maintain or increase domestic investment, and making these domestic investments requires the development of pension companies to collect and invest contributions, domestic securities markets to channel these investments, and domestic insurance companies to convert pension assets into retirement annuities, 2) "political reality" precludes "theoretical niceties," and investing abroad is simply a political non starter, 3) the difference between having all rather than a significant minority of pension assets invested abroad is not large and the Bank advocates investing a portion of assets abroad, and 4) terms of trade risk makes investing all pension assets abroad too risky.

International Capital Mobility

None of these excuses hold water. First, from the perspective of an economically small developing country the world capital market has gigantic stocks of capital that are available to import. Indeed, there is ample evidence that the world capital market waits with baited breath to invest in those developing countries that have transparent and sound economic policies. There's also ample and very recent evidence that, at a moment's notice, global capital will flee developing countries that do not have such policies. To grasp the size of the world capital market compared to that of a developing country's, note that current market valuation of the Russian stock market is less than the current market value of Home Depot – a single, relatively inauspicious U.S. company.

Instead of insisting that developing countries adopt sound and transparent policies (the most important of which is opening themselves up completely to direct foreign investment and competition in all areas of commerce, banking, finance, and insurance and adopting US or EU regulatory, reporting, anti-trust, and supervisory laws and institutions), the Bank adopts the attitude that since its client economies aren't going to open up, the Bank's job is to help them stay closed. Since the Bank takes financial market closure as given, it concludes that the only way to increase domestic investment is through increased domestic saving. This is akin to telling someone dying of thirst to dig a well rather than sip from the faucet.

Political Reality and Theoretical Niceties

Second, the Bank has the power to create its own "political reality." It can either a) make full international investment and diversification of pension assets a sine qua non for its approval of pension reform loans or b) overcome any nationalistic objection to the full international investment and diversification of pension assets on grounds of reduced domestic investment by providing capital inflows, in the form of loans, that maintain, if not increase, the level of domestic investment. Furthermore, the art of politics is selling ideas. The idea of investing abroad in a fully diversified manner at low transactions cost with Western custodial arrangements should not be a hard thing to sell, if one tries. This is especially true if one is selling to a public, like the Russian one, that can otherwise look forward to being forced to invest at high transactions costs in highly risky domestic investments.

The Fixed Costs of Investing Pension Assets Domestically

Third, the difference between having all or most pension assets invested abroad is potentially huge not only for reasons of financial and political risk diversification but also because of the very considerable fixed costs of setting up and then regulating, supervising, and insuring (as lender of last resort) domestic securities markets, pension companies, and insurance companies. The moment a country decides, as part of its pension reform, to invest even one dollar domestically, it is forced to a) establish pension companies to collect that dollar, b) decide how to regulate and supervise those companies, c) determine the securities in which the pension companies can invest, d) regulate the market in the securities in which the pension companies invest, e) specify how to annuitize the withdraw by contributors of their accumulated pensions, and f) regulate and supervise the insurance companies selling the annuities.

Moreover, in both advocating and enforcing less than 100 percent foreign investment and diversification of pension assets, the Bank signals to its client countries that is not particularly concerned about investing pension assets abroad. These countries take this signal to heart, so when it comes to pension reform, they mandate very little, if any, international investment and diversification of their pension assets.

Lots of problems emanate from this decision. To begin, in many of the Bank's client countries, there are very few firms listed on the domestic stock exchange and an even smaller number of firms comprise the bulk of the stock market's valuation. Apart from the stocks and bonds of these firms, there are only two other assets – government debt and mortgages and other private loans – suitable for pension fund investments.

Hence, the Bank finds itself advising countries to risk large proportions of their workers' retirement incomes on a) the fortunes of a handful of domestic companies whose future success is highly uncertain, b) nominal government bonds that are subject to effective default via government-produced inflation, and c) mortgages and other private loans whose repayment is also subject to great risk. To make matters worse, the return to domestic portfolios in developing countries is highly dependent on the performance of the overall economy – the same economy that determines the wages of pension contributors. Hence, putting workers' pensions in domestic assets ends up greatly compounding the risks they face on their human capital.

Bank staff are not entirely oblivious to these problems. They refer to them when they worry out loud that the *financial preconditions* for pension reform (as they define such reform) are "inappropriate." In response, they modify their standard approach to pension reform by either a) requiring that, at least in the short run, the bulk of pension fund assets be invested in government bonds or b) abandoning entirely the privatization of the pension system and installing a *notional* pension system that continues to leave the country saddled with a pay-as-you-go system, albeit one that may be less expensive and that provides better linkage between marginal pension contributions and marginal pension benefits.

<u>Real Exchange Rate Risk</u>

Fourth, for most Bank client countries, improvements in real exchange rates are positively correlated with the economy's performance. Hence, investing abroad provides an opportunity to hedge real exchange rate risk; i.e., when the real exchange rate is high and the economy is performing well, the relative value of one's foreign assets will be low because of the appreciation of the exchange rate, whereas when the real exchange rate is low and the economy is performing poorly, the relative value of their foreign assets will be high because of the depreciation of the exchange rate.

Moreover, even if the correlation between a country's real exchange rate and its economic performance is negative, the gains from international diversification and investing at low transactions costs would almost surely outweigh any risks to foreign investment arising from real exchange rate movements. Compare, for example, investing in the stocks and bonds of a handful of companies in Bolivia with investing in the stocks and bonds of the thousands of major companies of the world and the bonds of all of the world's developed and developing countries.

## III. The World Bank's Approach to Pension Reform

The Bank's approach to pension reform has the following ten elements:

1. Promise workers benefits accrued under the old system. In defining these benefits, raise the old system's retirement ages and reduce the generosity of the benefit formula.
2. Reduce workers payroll taxes and mandate that workers contribute all or a portion of their payroll tax cuts to individual pension accounts.

3. Establish competing domestic pension companies to accept and invest workers' contributions.
4. Require that pension companies invest the bulk of their deposits domestically -- in government bonds, private bonds and mortgages, and the local stock market**.**
5. Permit pension companies to compete with one another for contributions.
6. Establish a high, non-earnings related minimum pension benefit to protect workers against low or negative rates of return earned by their pension companies.
7. Pay for the minimum pension benefits on a pay-as-you-go basis.
8. Establish regulations to supervise the operations of the pension companies and the domestic securities market.
9. Permit governments to deficit-finance their transitions to the new system without checking the implications of this policy for the government's intertemporal buget gap.
10. Allow individuals to take their benefits in non-annuitized form in old age or to purchase annuities on their own.

***Problems with the World Bank Approach***

The Bank's approach to pension reform has as many problems as it has features. Most of the problems, many of which have already been mentioned, stem from the Bank's insistence on investing pension fund assets at home.

The Bank's Insistence on a Minimum Pension

The Bank includes a minimum/basic pension as part of its standard pension reform package. Why? Because it knows that the domestic investment of pension fund assets that it is also promoting is extremely risky and could easily turn sour. Consequently, it feels compelled to protect retirees with respect to just such an outcome by insisting on a high minimum benefit. To make matters worse, the Bank encourages countries to finance their minimum benefits on a pay-as-you-go basis. In so doing, the Bank is installing essentially the same kind of system the country desperately needs to eliminate. In the long run, the country still has a high payroll tax or some other tax that is financing the high minimum benefit. In addition, there is no linkage, at the margin, between the taxes workers pay for the minimum benefit and the size of this benefit; i.e., all workers get the same benefit regardless of their earnings.

This rear guard action by self-styled Bank reformers to preserve the status quo is dubbed the *first pillar* of a three-pillar system, in which the *second pillar* is a privatized pension program, and the *third pillar* is voluntary occupational pensions. Unfortunately, the first pillar is a real killer. It not only kills the prospect of ever truly escaping pay-as-you-go finance of government pensions. It's also used to excuse a very high degree of extremely risky domestic investment in the "privatized" second pillar.

## Fiscal Malfeasance in the Name of Pension Reform

The term privatized certainly deserves quotes here. The preponderance of government debt in the portfolios of the newly created pension companies in countries that adopt the Bank's approach raises the question of whether the entire reform is simply an elaborate shell game. In this putative shell game, workers, in the new regime, make contributions to their pension funds, rather than to the government, and the pension fund turns around and gives the contributions right back to the government as loans. So the cash flow from the workers to the government remains the same. In the old system, workers receive implicit I.O.U.s to future government pension benefits in exchange for their contributions, whereas under the new system they receive, via their pension funds, explicits I.O.U.s (government bonds) that promise to pay interest and principal.

If the implicit and explicit I.O.U.s have the same present value, then the “reform” has not reduced the present value of the government’s future expenditures – it has simply relabeled them. Of course, the typical pension reform also involves changes in the present value of future government receipts. If this present value is also left unchanged by the reform, the entire enterprise will, from the perspective of the government’s intertemporal budget gap, be just a shell game.

Bank-supported reforms typically include significant reductions in the accrued benefits paid to workers under the old system. Indeed, the Bank has, over the years, developed a sophisticated software package, entitled PROST, to calculate precisely how much benefit obligations are reduced by pension reform. So Bank-supported reforms are certainly not shell games. Unfortunately, once one takes account of the receipt side of the ledger, Bank-supported reforms may be worse than shell games, at least from the perspective of the government’s intertemporal budget gap.

The problem is that the Bank does not check whether the present value of receipts arising from its reform rises or falls, and, if it falls, whether it falls by more than does the present value of expenditures. To do this, one needs to consider the change in the present value of all government receipts arising from the reform, not just the change in the present value of payroll taxes that directly finance pension benefits. Unfortunately, the PROST model is not yet equipped to handle all government receipts.

Why does one need to understand the change in the present value of all receipts? The reason is that, over the short- and medium runs, Bank-supported pension reforms typically involve deficit finance of the difference between the benefits payable by the old (pre-reform) pension system and the reduced payroll tax receipts. If the interest and principal on this new debt issue is repaid with tax revenues, rather than simply borrowed, those tax revenues will most likely be general revenues, such as income taxes or value added taxes.

Since the Bank isn't able to check how much of the newly issued debt is to be repaid, it isn't able to say whether the reform is reducing or increasing the client-country's intertemporal budget gap. Worse, since the Bank itself isn't able to check, it doesn't require the client country to check either. Nor, apparently, does it bother telling the client country that the debt it issues in the course of reforming its pension system needs to be repaid; i.e., that the country needs to dedicate a stream of either a) future general revenue, b) future payroll taxes in excess of benefits payable under the old system, or c) future spending cuts to cover this debt. In doing and not doing all these things, the Bank is encouraging and promoting fiscal malfeasance of the first order. Worse yet, the Bank is lending its clients the funds to engage in this malfeasance.

Kazakhstan – An Example

Lest this accusation of fiscal irresponsibility be viewed as a figment of the author's imagination, consider the Bank's recent loan of roughly $100,000,000 to the Kazakhstan Government in support of its pension reform. The Kazakhstan reform features an immediate 10 percentage-point cut in the 25 percent payroll tax funding pension benefits with another 10 percentage-point cut to be made over the following 10 years. The reform also entails a modest increase in the existing system's retirement age and some reduction in the accrued benefits owed to existing workers for service under the old system. These benefit cuts notwithstanding, because of population aging, Kazakh aggregate real pension benefits are projected to remain essentially unchanged over the next quarter of a century according to the Bank's own benefit projections.

How is the huge loss in payroll tax revenues to be recouped so that Kazakhstan can pay these pension benefits? The answer is borrowing -- borrowing from the new pension funds as well as borrowing from the Bank, the IMF, and the Asian Development Bank. The amount of this borrowing is projected by the Bank to accumulate, in short order, to roughly 40 percent of Kazakhstan's GDP. To put this figure in perspective, this is approximately the ratio of official government debt (measured by the sum of past National Income Account government-sector deficits) to GDP in the U.S. Hence, we have the Bank, IMF, and ADB supporting a policy that will, over the space of a few years, encumber Kazakhstan with as much debt (relative to its GDP) as it took the United States over two centuries to accumulate!

The Bank's stated rationales for this policy are a) that Kazakhstan can afford this level of debt given its prospective oil and related revenues and b) the cuts in payroll taxes will stimulate labor supply in the covered sector and expand the tax base. Hypothetical oil revenues and extreme supply-side economics is not a basis for risking a nation's fiscal solvency. Kazakhstan can ill afford reckless fiscal policy, which is precisely what The World Bank is endorsing.

The Bank's Investment Advice – An Analogy

In the case of Kazakhstan, pension assets that aren't immediately handed back to the government as loans are to be invested in the stocks and bonds of Kazakh firms and other domestic assets. Kazakhstan is certainly a large country, but the contributions that its workers will make to their pension funds appear to be less than those that are made each year to the California state pension plan that covers state employees. To put the Bank's investment advice in perspective, consider how the Bank would advise the State of California to invest its pension assets. The answer is that it would tell the state to invest only in California companies. In so doing, the Bank would preclude investing in GM, Coca Cola, Microsoft, Toyota, Pierre Cardin, British Airways, Siemens, and the thousands of other major companies throughout the developed and developing world that aren't headquartered in California. This would seriously jeopardize the central goal of providing California State workers with reliable pensions. The state employees wouldn't stand for it, and the trustees of the state's pension system would be sued for dereliction of their fiduciary responsibilities.

Letting Workers Use their Pensions to Try to Beat the Market

Regardless of whether the Bank forces workers to invest domestically or internationally, there is no reason to establish a set of pension companies who compete with one another to "beat the market." By definition, not everyone can beat the average. So placing workers in pension funds that hold different assets is a prescription for increasing the inequality in their accumulated pension wealth and, therefore, in their retirement living standards. The simple way around this problem is to require that all workers' pensions be invested in the same portfolio. But in this case, one doesn't need a pension industry to invest pensions or to pay the high fees, bid-ask spreads, and other charges collected by top money managers. One simply needs to hire a computer.

Annuitization of Accumulated Account Balances

There is ample evidence from the U.S. and other developed economies that the private annuities market does not function well and has very few participants. Letting workers cash out their pensions in non annuitized form is an invitation for them to cash out too soon and run out of income if they live longer than they expect. Leaving workers to purchase annuities from the private insurance market when they retire is an invitation for them to lose a significant fraction of their old age resources in the form of insurance loads. The World Bank is issuing both invitations in adopting its laissez faire attitude about withdrawing pension account balances in old age or purchasing annuities from the private insurance market.

## IV. The Personal Security System

Having complained at length about the Bank's approach to pension reform, it's now time to present a straightforward and sensible alternative entitled The Personal Security System or PSS. The PSS has the following features.

1. Maintain benefits for current retirees.
2. Abolish current pension system at the margin, but provide workers in retirement the benefits they could reasonably expect to have accrued under the old system. This is much less than what they were being promised by the old and bankrupt system.
3. Mandate that workers contribute a fixed percentage (e.g., 8 percent) of their wages to Personal Security Accounts.
4. For married workers, allocate half of their contributions to their own accounts and half to their spouses'.
5. The government matches workers' PSS contributions on a progressive basis and makes contributions on behalf of disabled workers.
6. All PSS contributions (and the government matching contributions) are invested in a) special issue PSS bonds and b) a market-weighted global index fund of stocks, bonds, and real estate.
7. In the short run, World Bank and IMF assistance as well as proceeds from privatizations would be used to pay for benefits owed to retirees. Hence, in the short run, all workers' contributions would be invested in the global index fund. This would dramatically improve incentives for working in the formal sector and paying taxes.
8. When a birth cohort reaches age 60, its accumulated PSS account balances are gradually transformed into inflation-protected pensions. Each day, until the cohort reaches age 70, a portion of the cohort's outstanding balances are converted to pensions. Each member of the cohort receives a pension in proportion to its share of the cohort's collective balances.

9. Workers who die prior to age 70 bequeath their non annuitized account balances to their spouses, children, or other designated beneficiaries.

10. Benefits owed under the old system are financed by a) maintaining some part of the payroll tax, b) paying current workers their accrued, rather than their projected, government pension benefits in retirement, c) cutting or limiting the growth of government purchases, and d) through grants from the World Bank and the International Monetary Fund. A detailed intertemporal budget gap analysis would be undertaken to ensure that the reform ends up significantly reducing the gap on balance.

11. Once the transition is complete, the payroll tax dedicated to financing the transition is eliminated. Short-run cash-flow deficits during the transition are covered by the issuance of special-issue, inflation protected, 3 percent government PSS bonds. At the end of the transition, these bonds are completely retired.

12. The level of the dedicated payroll tax is set to ensure that, over the transition period, the present value of all revenue sources equals the present value of pension benefit payments due under the old system. Discounting is done at the 3 percent real rate paid by the PSS bonds. This ensures that at the end of the transition period, the dedicated payroll tax will be eliminated. This financing scheme determines at each date the amount of special-issue PSS bonds that need to be purchased by the PSS Trust. Any and all residual account balances held by the PSS Trust will be invested in the global index fund.

13. Workers receive quarterly PSS account statements. The PSS accounts represent private property. Contributions to PSS accounts are not subject to income taxation,

but withdrawals from PSS accounts are subject to income taxation. This affords consumption-tax treatment to these accounts.

14. The government puts out to international bid the separate jobs of a) collecting PSS contributions and paying out PSS pensions, b) investing PSS contributions in PSS special issue bonds and the global index fund, and c) converting PSS accumulated account balances into inflation-protected pensions.

***Advantages of the PSS Reform Proposal***

The Personal Security System improves benefit-tax linkage, protects non working spouses, improves intra- and inter-generational equity, resolves the existing pension system's long-term funding problem, and ensures workers a very high level of retirement income. In setting its matching contributions, the government can make the PSS system as progressive as it wants. By investing abroad in the manner recommended, workers become fully diversified across the world and pay extraordinarily low transactions fees. The country also develops a reputation for having a fully open capital market that will encourage foreign direct and financial investment. By requiring collective annuitization of each birth cohort's account balances, the PSS avoids adverse selection, high insurance fees, and the problem of the elderly running out of income in old age. In the long run, countries adoting the PSS plan will succeed in eliminating an extremely onerous payroll tax that reduces the ability of young people to save and lowers their incentive to work.

## V. Conclusion

When it comes to pension reform, The World Bank has too many contradictory goals that collectively lose sight of the ultimate rationale for a state-run pension system, namely insuring and ensuring the retirement income of the nation's workers. The Bank has not only relegated this primary goal to a secondary status, it has encouraged and led countries to engage in pension reforms that are, fiscally speaking, breathtakingly irresponsible. It is time for the Bank's top management to reassess this policy on its own terms, but also in light of the availability of a straightforward alternative – the Personal Security System – that can readily be implemented and that achieves all the legitimate goals of pension reform.