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# Pension Reforms: A Case for Pakistan

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The study deals with pension system reforms for the Pakistan economy and highlights the current situation and future prospects. The study presents an overview of empirical evidence on pension system reforms, the strengths and weaknesses of the pension system of Pakistan and the institutional development pertaining to pension reforms. Fully funded pension system can help to strengthen the formal channels of retirement savings and can help to get rid of problems prevailing in current pension system. If the decision to reform the pension system is not taken in time then in the near future rising pension expenditure would lead to increase in indirect taxes, reduction in development expenditure and/or increase in government borrowings. Although some efforts to reform the pension system had been made to reduce the government's rising pension bill, yet despite realization of the problem no serious effort had been made to reform the pension system in a fundamental way.

## 1. Introduction

Pension systems are intended to give income support to those individuals who bear losses in earning capability during old age, incident of disability or death of wage earner in the family. Thus, pension systems aim to reduce poverty among the old individuals and strive to smooth consumption between the working years and the retirement years, in such a way that individuals do not bear a massive drop in living standards when old age and disability reduces their earning ability. The former objective is obtained through non-contributory pension system and the later through contributory pension system.

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Most of the systems of old age security are publicly managed schemes and are financed by payroll taxes on a pay-as-you-go basis. This system is under increasing strain throughout the world. Schwarz et al. (1999) and James (1998) pointed out that over the next 35 years, the fraction of world's population that is above 60 would roughly double, from 9 percent to 16 percent. The continuous fall in fertility rates coupled with rising life expectancy leads to a decline in the proportion of children and an increase in the proportion of elderly. The number of pensioners per worker is increasing continuously; hence as a result higher wage taxes are required to provide pension benefits to growing number of retirees. [ James (1998), Sarrapy *et al.* (1996), Corsetti *et al.* (1995), Holzmann *et al* (2005)]. This situation results in high evasion, pushes labor into informal sector and raises the burden on public treasury.

The public pay-as-you-go pension system is expected to become fiscally unsustainable in near future. The most important threat comes from the changing demographic structure, especially fall in fertility rates coupled with rising life expectancy. The resulting increase in the number of pensioners per worker leads to higher wage taxes and/or growth in implicit pension debt coupled with financing gap, thereby making the current pay-as-you-go pension system unsustainable in many countries.

If safety measures are not undertaken in response to aging of population then it is expected that the existing pay-as-you-go pension system will become insolvent in many countries. In order to avoid the dangers associated with pay-as-you-go pension system, the World Bank has recommended a multipillar pension system. These new arrangements contain three pillars [Holzmann (2000), Holzmann et al. (2005), James (1998))]:

- A mandatory, publicly managed, tax-financed pillar for redistribution,
- A mandatory, privately managed, fully funded pillar for savings, and
- A voluntary pillar for people who want more protection in their old age.

The most important of these arrangements is the second pillar. The justification for mandatory fully funded pension system is workers' myopia. A large number of people possibly will be shortsighted, might not save sufficient amount of money for their old age on a voluntary basis, and possibly will turn into a burden on society when they become old.

The rationale here for defined contribution system is that the close association between contributions and benefits in this new arrangement will discourage evasion, escape to the informal sector, and other labor market distortions because in this system people do not consider their contribution as a tax.

The justification for fully funded pension system is that under this system countries are not required to make promises today that they will be unable to fulfill tomorrow and it prevents large payroll tax increases that are required in a pay-as-you-go system with the problem of changing demographic structure. Furthermore it avoids large unintended intergenerational transfers from younger to older generations.

The characteristic of privately managed pension system implies that the investment strategy will be determined by the economic objectives instead of political interest. This produces the best allocation of capital and the highest return on savings.  It helps countries develop their financial markets.

Several Latin American, OECD, and transition countries have already adopted multipillar systems, and many other countries are seriously thinking about the new system.  Countries with large implicit pension debts are having difficulty in overcoming political opposition and transition costs. However, developing countries can choose a multipillar system almost from the start because they are at a relatively early stage.

The pension system reforms are taking place at a growing speed and it ranges from Latin America (Chile 1981, Mexico 1991, Peru 1993, Argentina 1994 and Columbia 1994) to OECD countries (Switzerland 1985, Australia 1992, United Kingdom 1986, Italy 1996). Moreover, debates on major reform options are in process in other Latin American countries, some OECD countries, and many developing countries in Asia and Eastern Europe [Madrid (2002), Queisser et al. (1997), Disney et al. (2000), Schieber et al. (1996)].

Pension reforms can be grouped into at least two different categories involving minor reforms and major reforms. Minor or parametric reforms involve changes in parameters of current pension system such as contribution rate, structure of benefits and eligibility criteria [Aiyer (1997), Schwarz (2006) and Chand (1999)] whereas major or systematic reforms involve introduction of a new type of pension system like fully funded pension system to replace or complement the existing system [Schwarz et al. (1999), Holzmann (2000), Holzmann et al. (2005), James (1998)].

Since we are unable to find any relevant theoretical or empirical study with reference to Pakistan, there is need to probe this issue in detail and look for evidence on the need for pension system reforms for Pakistan. The present study explores the following issues with reference to Pakistan i.e.

- Whether there is a need for reforms in the pension system of Pakistan?
- Are we facing or are expecting to face in the next 20 or 30 years the same problems in our pay-as-you-go pension system as faced in several other developing countries?
- In case we are facing the same problems then should we substitute defined-benefit pay-as-you-go system by fully-funded defined contribution system based on individual account with minimum pension guarantee provided by government?

The remaining portion of the study is organized as follow. Section 2 discusses the theoretical and empirical literature on this area briefly. In section 3 motivations of reforming the current pension system are discussed. Recent institutional developments pertaining to pension are presented in section 4 and major issues for reforms are discussed in section 5. Section 6 discuses issue in new system design and section 7 concludes the study. Finally section 8 gives some policy guidelines for successful implementation of pension reforms.

## 2. Literature review

Most of the systems of old age security are publicly managed schemes and financed by payroll taxes on a pay-as-you-go basis. Pay-as-you-go public pension system is under increasing strain throughout the world. Over the next 35 years, the fraction of world's population that is above 60 would roughly double, from 9 percent to 16 percent [Schwarz et al. (1999) and James (1998)]. Rising life expectancy and declining fertility rates are resulting in problem of population ageing. More and more countries are facing this problem.

The actuarial projection that the Social Security trust funds will exhaust by the year 2030 in the U.S.A and most European countries has promoted interest in alternatives to shift from the pay-as-you-go system to a funded or privatized system Feldstein et al. [(1996), Boldrin et al. (1999)].

In many countries around the world the transition from unfunded pay-as-you-go pension system to fully funded pension system is now taking place. The specific rules and transition arrangements are different in all these countries but they all have the common feature of creating individual accounts [Feldstein (1997), Mitchell et al. (1997) and Carpio et al. (2002)].

Pension system reforms are usually necessitated by changes in demographic structure and the consequential financial unsustainability of many public systems. Pension system reforms are also necessitated several issues that are associated with pay-as-you-go pension system. One impediment of pay-as-you-go defined benefit systems is that the high payroll tax will possibly direct to labor market inefficiencies and results in evasion and escape to the informal sector, where efficiency is lower [James (1998), Sarrapy et al. (1996) and Corsetti et al. (1995), Wise (1997)].

Pay-as-you-go public pension system results in unintended intergenerational transfers, especially to high-income groups. In an unfunded system, intergenerational transfers take place routinely as a result of the aging and maturation process [James (1998) and Schwarz

(2006)]. Pay-as-you-go public pension system results in misallocation of public resources as scarce tax revenues are used for pensions rather than for health, education, or infrastructure [Schwarz (2006)].

Goswami (2002) and Gillingham et al. (2001) stated that the most serious trouble with the current pension system is that it fails to get in touch with the vast majority of population and no safety net is available for those who are not covered under the system.
The question is whether the reforms that will eventually be undertaken will be parametric or systematic that will not only protect elderly and lower income workers but also bring benefits to the macro economy. Parametric or minor reforms involve changes in eligibility criteria such as retirement age, the rate of contribution or the structure of benefits. These changes are representative of many pension reforms that are taking place around the world [Aiyer (1997), Schwarz (2006) and Chand (1999)].

Countries in the Latin American region have been at the front compared to other countries in initiating systemic major reform from pay-as-you-go defined benefit to fully funded, defined contribution pension plans [Schwarz et al. (1999)]. Although parametric or minor reforms alleviate some of the fiscal burden but fiscal problems reappear in the long run. The study concludes that the only way to effectively solve the pension system issue on a permanent basis is to move toward the fully funded system currently underway in Latin America, Australia, Poland, and Kazakhstan and under consideration in a number of other countries.

Privatizing social security system can offer extensive long run economic gains but these gains are neither free nor immediate. Some transitions have to face higher fiscal pressures [Kotlikoff (1996) and Kotlikoff et al. (1998), Serrano’s (1999)]. Privatization of social security can generate substantial long run increase in output, capital stock and real wages in spite of the fact that initial elderly are compensated for their higher fiscal burden arising from the consumption tax [Kotlikoff (1996), Kotlikoff (1995)]. Corsetti et al. (1995) found much larger and sustained effects of replacing a pay-as-you-go pension system by a fully funded system in the framework of an overlapping generation model with endogenous growth and formal-informal production sectors.

The above empirical evidence on pension system reforms makes it clear that reforming the current pay-as-you-go pension system is inevitable in the light of changing demographic structure and to control the rising financial burden of public pension schemes. Several Latin American, OECD and transition countries have reformed their pension systems and many others are thinking to take initiative. The analysis of all these studies indicates that countries have to bear the short-term cost for reforming their pension system but the long-run benefits tend to outweigh the short-term costs. Furthermore, fully-funded pension system provides permanent solutions to fiscal problems of pay-as-you-go pension system and it will enhance economic growth and development through its positive effects on savings, capital accumulation and financial market development.

## 3. Old Age Protection .in Pakistan: Current State and Future Prospects

The debate on pension reform is gradually intensifying in Pakistan. The current pension system in Pakistan can be referred to as pay-as-you-go (PAYGO) system, which is hampering the economic performance of many developed countries e.g. those included in OECD[Disney (2000)]. Pakistan does not have a complete population wide-old-age income security system. Majority of old people continue to rely on support from their children for obtaining consumption in old age. A number of problems plague the pension system in Pakistan, including the following.

- There is a need for strengthening the formal channels of retirement savings because of the ongoing collapse of the traditional old age support mechanism and the rise in the elderly population.
- The existing pension system has low coverage, favoring the organized workforce while informal sector growing in size.
- The financial situation of government pension scheme is worsening because of rising system expenditure.
- Private sector workers are treated unfairly vis-à-vis public sector employees.
- Private annuity market is quite underdeveloped.

- Finally, the lack of proper and well covering pension scheme has hindered growth in saving rate, so crucial for promoting economic growth without reliance on external borrowing.

Major retirement saving schemes in Pakistan like provident and pension funds have coverage for workers in the organized sector. Most of the workers are engaged in the unorganized sector and have no access to any formal system of old-age security. Moreover, pension reforms are needed because of the fragmented nature of the existing benefit schemes. The existing retirement schemes have created great inequality between public and private sector workers. Public sector employees are honored with generous pension provision whereas workers in the private sector are either not getting any pension or pension granted to them is not sufficient to meet their old-age requirements.

In recent years, there have been some attempts to solve these problems. However, these efforts have largely been insignificant. The miscellaneous and conflicting set of problems faced by the pension system of Pakistan requires a more serious and consistent approach. On the one hand, there is a need to watch the growing expenditure on public pension programs despite a need to extend the coverage to the unorganized sector. Various government initiatives in the recent years such as suggested parametric reforms by the pay and pension committee and introduction of voluntary pension scheme by the Security Exchange Commission of Pakistan are inadequate, and further underline the need for an early and lasting reform of the current system.

Parametric/reform in defined benefits Pay-As-You-Go system will either reduce the level of pension benefits or require greater contribution from workers. Parametric/minor reform do not provide permanent solution to fiscal problems pay-as-you-go pension system as those just postpone the fiscal burden for the short period of time and open the door for yet another reform [Schwarz (2006)] as projections about fertility rate and life expectancy shows rising trend in life expectancy and falling trend in fertility rate [WDI (2009)] that results in increasing the number of pensioners per worker. Systematic reform in pension system provides permanent solution to fiscal problems of pay-as-you-go pension system. Many countries in the past 15 years have shifted from pay-as-you-go defined benefit system to fully funded defined contribution system or to a mixed system having both components.

### 3.1 Pension Structure in Pakistan[3]

Pakistan, like most other developing countries, does not have a wide pension system to care for the elderly population against economic deprivation and difficulties. Perhaps the main hurdles in introducing a payroll-tax finance public pension system for each and every citizen attaining old age are the persistently high rates of poverty and unemployment. Instead Pakistan has adopted a pension policy that is restricted to cover the organized sector workers and ignores the vast majority of the work force in unorganized sector.

The present pension system in Pakistan was introduced in 1954 in the form of pension-cum-gratuity scheme, 1954 and has since been adjusted from time to time. Its main features are as follow.

- Retirement age is 60 years.
- Voluntary retirement is possible on completion of 25 years of service.
- No pension shall be given to a government servant who resigned from government job before completion of 25 year service; however gratuity may be payable.
- Pension rate is 70% of the last drawn salary on completion of 30 years service.
- If service is less than 30 years, proportionate reduction in pension is made.
- Commutation is restricted to 35% of gross pension whereas the remaining is paid in the form of net pension.

The pension system prevailing in Pakistan can be referred to as pay-as-you-go pension system. Under the pay-as-you-go pension system the pension contributions of active workers are used to finance the pension benefits of current retirees. A specified pension on retirement is

[3] The discussion in this section is partly based on information taken from The World Bank (1998), Raziq (2005) and *Year Book of Finance Division (2007)*.

provided to workers who contribute for a certain period of time, equal to a certain fraction of their salary.

According to Raziq (2005), Pakistan's present pension scheme for its public servants is a defined benefit in nature. Pension is determined as a percentage of final salary and length of service. There are no contributions to the scheme and the system is maintained on an unfunded basis, that is, presently there is no pension fund. Government of Pakistan exclusively finances the expenditure by obtaining a provision in the yearly budget for this purpose.

Employees having the government service of 30 years but not less than 25 years, retire with a pension of 70 percent of the value of basic pay plus certain other emoluments. Pension is not systematically indexed for inflation, though pension scales are revised occasionally to compensate pensioners for some of the loss of purchasing power caused by inflation. On the other hand, the provision of commutation facility at the time of retirement practically doubles the lifetime value of pension [World Bank (1998)].

Our analysis concentrates on pension because it is the main source of income support for civil service retirees. But as stated in World Bank (1998) and Raziq (2005), civil service retirees in Pakistan also receive several additional benefits including the following.

**Gratuities to short-service employees**
An employee receives 1 month's pay for every year served in case of having less than 10 years of service, or in case of job being abolished before 25-year minimum entitlement period, or 1.5 month's pay in the case of death or disability.

**Family (survivor) pensions**
The widows of pensioners collect 50 percent of the pensions at the time of death, to be paid for life or till remarriage.

**Mandatory savings accumulated in General Provident Fund**
It is mandatory for employees to contribute to this fund against which borrowings can be made during one's working career. Government does

not contribute to this account but pays an interest rate higher than market rates.

**Survivor benefits provided by the Benevolent Fund**

Employees must contribute 2 percent of pay to this fund, which pays a widow (or widows) generally 35 percent of wages for premature death or disability up to age 70.

**Life insurance provided by the Group Insurance Fund**

This fund contributes about 2.5 times the annual salary. Government pays premiums for the lower-grades employees only, while the higher-grade employees pay their own premiums.

**Access to health facilities**

Retired government servants are entitled and permitted to medical treatment at government expense at parity with facility accessible to the serving government employees. They also have the facility of reimbursement of medical charges.

To sum up, the government employees are provided with a broader social safety net than is available to population in general. Private sector workers are less fortunate in this regard. Under the current law, all employers with 10 or more workers are required to register themselves in Employees Old Age Benefit Institution, (EOBI), an old age, disability, and survivor benefit program. Employers are required to contribute five percent of the first Rs.3000 of an employee’s wage per month to EOBI. However, most of the private sector employers do not register themselves in EOBI to ovoid contribution that they have to make for the provision of old age security to their employees. This situation results in the growth of informal sector in Pakistan.

Hasan (2005) pointed out that at present in Pakistan the retirement savings tools and instruments are not adequate and a small number of them available are also not fully utilized because majority of the workers are self-employed. Public sector, which has vast coverage of pensions, is also a large employer. As a result, a greater part of the pensions given is by the government and these are typically defined benefit in nature. The defined benefit pay-as-you-go pension system generates a liability and burden for the government. Moreover it also diminishes the motivation to save more than the requirement of the scheme. The employees miss the chance of getting pensions if they leave or switch to private sector too early.

Most common and familiar forms of private occupational saving schemes in Pakistan are gratuity funds and provident funds [Hasan (2005)]. With these schemes the contributed 'savings' can be used by participants as they change their jobs instead of retirement, so these schemes cannot be considered and classified as pension schemes. Presently, private occupational savings schemes, including pension funds, gratuities and provident funds are not being regulated by any agency [Finance Division Year Book (2007)]. There is no registration of occupational pension and saving schemes, nor are their statistics published on the number, assets, memberships or any demographics of pensions.

A number of tax advantages are provided to the employers, participants of pensions and invested assets holders under the regulation of private occupational pension and saving schemes documented by CBR. So CBR can be seen as a regulator of these schemes.

The Security Exchange Commission of Pakistan is trying to develop a regulatory framework for private occupational pension and saving schemes in order to develop a uniform system of pensions in the country. The Commission has recently introduced voluntary pension system (VPS). This is a voluntary defined contribution system in which anyone in Pakistan over the age of 18 years (salaried or self employed) with a valid National Tax Number is eligible to participate.

The VPS involves several tax incentives to make it attractive to potential participants. Under the VPS those individuals who are not covered under any pension scheme would also be capable to save for their old age by making tax-free contributions. Under the new system the contributions as well as the gains from investing them will be tax-free and tax shall be levied at the time of withdrawal of money. The most important advantage of VPS over defined benefit system is portability. Under this system people will have the power to make decision regarding the amount of investment, type of investment; moreover their savings would remain with them even if they change jobs. The participants in VPS would also have the choice to change their pension fund managers if they are not satisfied with the performance of their existing fund managers.

The formal old age income security in Pakistan can be classified into two categories. The first category consists of statutory pensions with provident funds for the organized sector employees and the second category consists of voluntary pension system for self employed and unorganized sector workers

### 3.2. Motivations for Pension Reforms[4]

There are several compelling reasons that call for major reforms in the pension system in Pakistan to make it an efficient, equitable and ethically desirable social security system, thus fulfilling its goals in the long run. These motivational factors are discussed as under.

#### 3.2.1. Population Ageing

The process of population ageing is a product of demographic transition caused by reduced mortality and fertility levels. The continuous fall in the fertility levels coupled with improvement in the mortality rate leads to a decline in the proportion of children and an increase in the proportion of population in higher ages, resulting in ageing of population. With increasing number of elderly population (consisting of those aged 60 years and above), the issue of evaluating pension and social security system has attained greater importance at both regional and global levels. It becomes essential for policy makers to adjust their pensions and social security systems according to the ageing population.

The population-ageing problem has recently gained greater importance across the world. The process of population ageing is more severe for developed region of the world. The developed region of the world has already experienced demographic transition, consequences of rising

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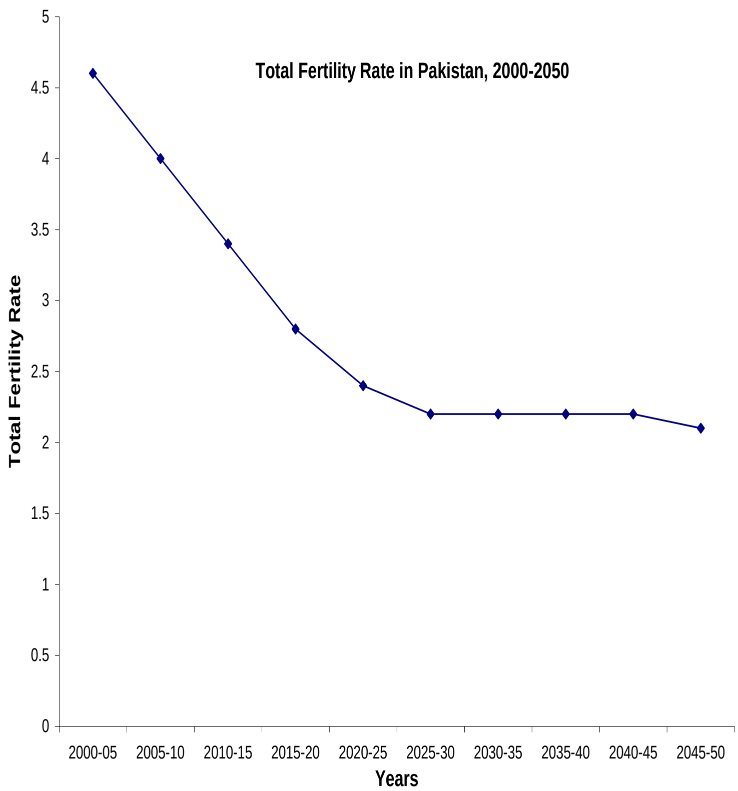
[4] The discussion in this section is partly based on information taken from Kanwer *et al*. (2005), The World Bank (1998) and Kardar (2006).

dependency ratio and the related challenges of developing pension systems. However, in many developing countries the problem of population ageing is in process.

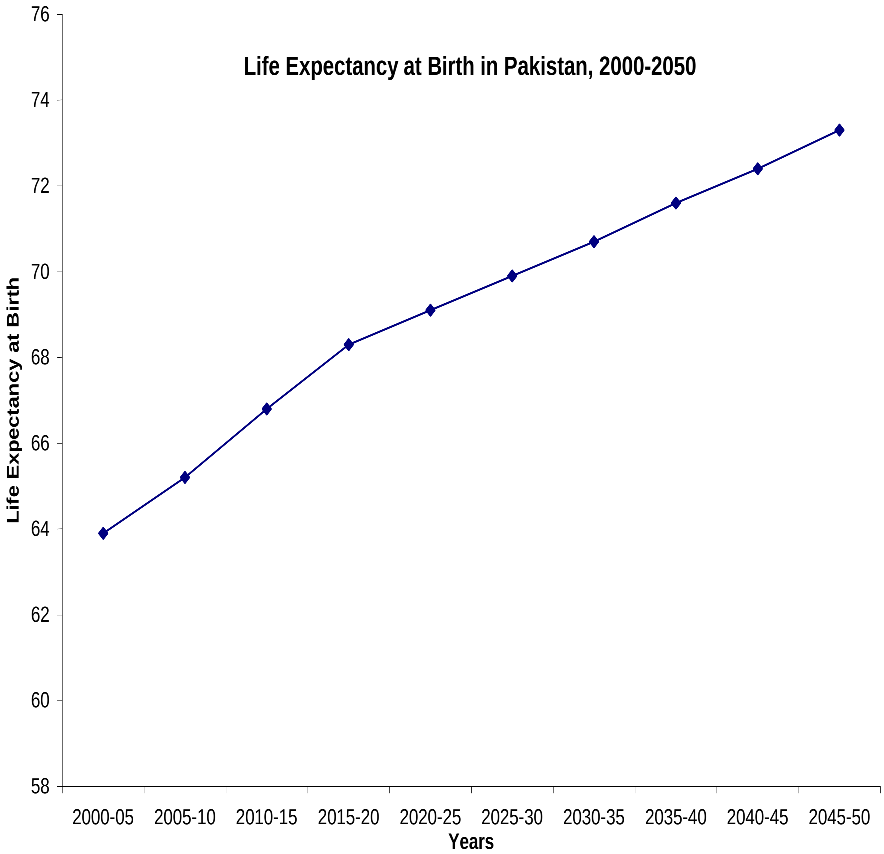
In Pakistan, the process of demographic transition had started in early 1990s. A number of studies in the recent years have shown consistent decline in mortality with resultant rise in life expectancy and a reduction in total fertility rate in recent years [Sathar et al. (1998), Ali et al. (2001) and Hakim et al. (1998)]. So the proportion of elderly is expected to increase in coming years due to rising life expectancy and declining fertility rates. Figure i and Figure ii about future projections shows rising trend in life expectancy at birth coupled with falling trend in fertility rate in Pakistan [WDI (2006)].

**Figure i:** Future Projections for Total Fertility Rate at Birth in Pakistan




Source: WDI (2009)

**Figure ii:** Future Projections for Life Expectancy at Birth in Pakistan




Source: WDI (2009)

In Pakistan the proportion of elderly is still relatively low like some other developing countries that have recently started their demographic transition, but they have large number in absolute term because of the large population base. According to Population Censuses 1998, the proportion of elderly has ranged between 5.5 and 7 percent. The absolute number of elderly population has increased from 1.9 million in 1951 to 7.3 million in 1998 [Shresth (2003)].

According to Palacios (1996) the proportion of elderly population in Pakistan is expected to increase further, to 12 percent by the year 2020. The study focuses on the demographic indicators including the percentage of population over 60, 65, and 75, the ratio of old to working age population and dependency ratio. In most cases the old age dependency ratio is defined as the ratio of persons over 60 years old to persons aged 20-59. The study has also chosen this ratio over other possible combinations based on the observed age distribution of contributors and pensioners in most public pension schemes around the world. Table i shows the projections of demographic indicators for Pakistan presented in Palacios (1996).

**Table i:** Projected Percentage of Elderly Population in Pakistan and Dependency Ratio

| Years | Percentage of population aged 60 and above | Percentage of Population aged 65 and above | Percentage of Population aged 75 and above | Population aged 65 and above / population aged 15 to 64 | Population aged 65 and above / population aged 20 to 64 | Population aged 60 and above / population aged 20 to 59 |
|---|---|---|---|---|---|---|
| 1990 | 4.6 | 2.8 | 1 | 5.3 | 6.6 | 11.3 |
| 2000 | 4.7 | 3 | 1.1 | 5.5 | 6.8 | 11 |
| 2010 | 4.9 | 3.1 | 1.4 | 5.2 | 6.4 | 10.3 |
| 2020 | 6.3 | 3.8 | 1.9 | 6.1 | 7.2 | 12.4 |
| 2030 | 8.4 | 5.3 | 3 | 7.9 | 9.2 | 15.5 |
| 2050 | 14.2 | 9.3 | 6.3 | 13.7 | 15.3 | 25.5 |
| 2075 | 22.8 | 16.9 | 11.1 | 26.7 | 29.7 | 44.7 |
| 2100 | 26.7 | 21 | 12.7 | 34.7 | 38.7 | 54.9 |
| 2125 | 28.8 | 23.21 | 13.7 | 39.4 | 43.9 | 61 |
| 2150 | 29.8 | 24.2 | 14.2 | 41.7 | 46.4 | 64 |

Source: Extracted from the tables appendix I.B.2, I.B.3, I.B.4, I.B.6, I.B.8 and I.B.10 in Palacious (1996)

The table shows rising proportion of elderly, rising dependency ratio and falling support ratio. If the dependency ratio is defined as the ratio of persons over 60 years old to persons aged 20-59 then population-ageing problem is expected to become severe for Pakistan after the year 2010. Approximately the same situation prevails if we change this ratio with other possible combinations.

In Pakistan majority of the labor force is engaged in the informal sector. As a result most of the old people do not have access to any formal pension or social security scheme. So, in the situation of rising poverty in Pakistan, it is expected that older people will have to face more difficulties in life. This is because the old values and traditions of providing care and respect to older people are becoming uncommon due to rapid modernization, urbanization, and the resulting economic and financial pressures.

In view of the expected rising proportion of elderly in Pakistan, it becomes important for policy makers to amend their pension and social security system according to the ageing population. Moreover, given the continuing trend of declining informal support channels for older people, this population ageing emphasizes the need for proper formal system for old age economic security.

### 3.2.2. Breakdown of Traditional Support Mechanism

Pakistan is experiencing the breakdown of traditional support mechanism for older people based on strong family institution. In the past elderly were able to live with their children and derive support from them but now the breakdown of joint family system side by side with pressures of urbanization and migration are leading to deteriorate the traditional means of support for elderly population. [Shresth *et al* (2003), Silva (2004)].

### 3.2.3. Low Coverage and Focus on the Organized Sector

Existing pension system in Pakistan covers the organized sector workers, constituting less than 10 percent of aggregate labor force. The pension system covers close to 3.5 million government employees (of whom 0.6 million are in armed forces. Pension payments to them account for more than 45 percent of total pension expenditure), representing a mere two percent of the population and under 10 percent of labor force [Kanwar et al. (2006)].

### 3.2.4. Inequity within the Organized Sector

The current pension system has been highly fragmented because of the unequal benefit levels within the organized sector as public employees are treated generously and liberally in comparison to private organized workers. A prominent feature of current pension system is the difference in range and levels of benefits within the organized sector. In addition to a self-contributory provident fund, generous defined-benefit pension privileges, which provide protection against long life and possibly the inflation risk, are given to public employees. On the other hand, in the private sector either the workers are not getting any pension benefits or the pension benefits given to them are not adequate to meet their old age requirements.

### 3.2.5. Rising Financial Burden of Public Pension Scheme

The expenditure pattern of the noncontributory, unfunded pay-as-you-go public pension program is exerting pressure on budgetary allocations. There is rising trend in pension expenditure of Pakistan and it is expected to increase further as more and more civil servants retire.

Figure 4.3 shows moderately rising trend in pension expenditure of federal civil servants pension. The public sector encompasses provincial, municipal as well as central governments. It also includes military pension spending, but information on provincial, municipal and military authorities cannot be displayed due to complications in data availability.

Palcious (2006) stated that in large countries with federal system of government, the magnitude involved in provincial and local governments can be substantial. In some cases like India, Mexico, and Pakistan, the number of civil servants in sub-national government are greater than those at federal level. In most countries, pensions paid to retired soldiers encompass a major part of pension bill. This is especially true in India Jordan and Pakistan, having large armies.

Figure iv shows military versus civil servants pension expenditure in India and Pakistan during the period 1993-2004. In case of Pakistan expenditure on defense pension has been more than the spending on civil servants pensions. If military pensions continue to be financed on a pay-as-you-go basis and early retirement is allowed then the ratio of pensioners to contributors will increase. Consequently the required contribution rate will grow rapidly over time to finance pension benefits.

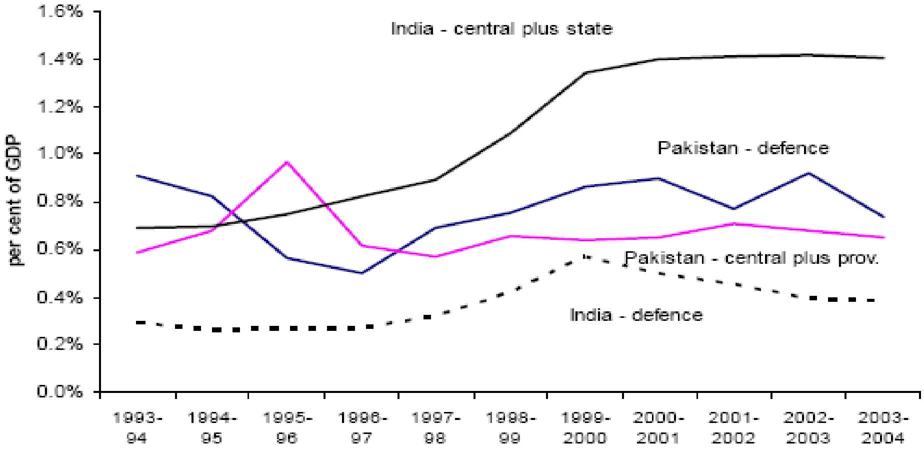
Moreover, military pensions that begin to be paid when retired soldiers are young are not consistent with the objectives of pension system that are established to deal with old age.

The annual federal civil servants pension payments have increased from rupee 12 billion in 1991-92 to rupee 46 billion in 2006-07 (Figure iii) and the system is threatening to become unmanageable as more civil servants retire. If attempts are not made to control pension expenditure then in the near future it can be harmful for Pakistan economy because the increment in pension expenditure would lead to increase in indirect taxes, reduced development expenditure or increased government borrowings. Moreover, the most interesting fact of pension system in Pakistan is that in armed forces there are more pensioners than active workers. As life expectancy increases, this situation will become even worse.

**Figure iii:** Actual Expenditure on Civil Servants Pension as % of GDP, 1991-2007


Source: Based on data taken from AGPR Pakistan and various issues of Economic Survey

**Figure iv:** Pension Spending for Civil Servants and Military in India and Pakistan, 1994-2004




Source: Palacios et.al (2006)

### 3.2.6. Commutation Facility to Government Employees

Civil servants are given a facility called commutation, under which they can commute 35% of their pension in lump-sum form at the time of retirement. Lump-sum provisions are also available around the world. But the terms and conditions under which commutation facility is available to government employees in Pakistan are unique in the sense that commutations, which in essence all advance payments, are available without discounting. However, in other pension system the amount paid is discounted to reflect the time value of money.

So, in Pakistan the entire interest cost associated with commutation is borne by the government. The payment of commutation without discounting doubles the government's long-term and unfunded fiscal liability for such pensions. So, in Pakistan the current commutation facility is more generous than it should be. It is subject to the following major problems.

### 3.2.6.1. Pensions as Insurance

The fundamental function of pension is to provide insurance against long life. There is no reliable way to assess longevity of government employees. The long-lived person could be at risk of outliving his or her assets. The losses on long-lived persons can be offset by savings on those who die earlier. So, with practice of commutation the employer's ability to pool longevity risks is reduced and the cost of pension provision is increased for the government because both long-lived and short-lived persons receive large portion of their pension payments on the day of retirement. Moreover, there is greater possibility that pensioners may outlive his or her assets, because people who receive a big amount once in life face the risk of making mistakes with this money. Ultimately, we can say that the current practice of commutations is more generous and risky for its beneficiaries.

### 3.2.6.2. Complications in Reforming Compensation Package

The practice of commutation creates hurdles in reforming compensation package as a whole. For example, government cannot consider monetizing certain in-kind pay and allowances without revising the structure of commutation because doing this would mean that government pension liabilities would explode. There can be the possibility that pension payments would exceed the pre-retirement compensation.

### 3.2.7. Early Retirement

In other countries employees who want to retire before the normal retirement age have to accept reduced benefits, calculated on the basis of their life expectancy, to reflect the longer period during which they will collect benefits. But the system prevailing in Pakistan is unique in the sense that employees who want to retire earlier reap higher benefits because the practice of commutation allows them to get half of a larger number of year's benefits in lump sum form. This situation will further explode the government pension liabilities in future due to population aging.

While early retirement can be used to have rapid changes in workforce than could be achieved through natural phenomena but the government should be careful not to commit the mistakes that some countries have made. In this regard the examples of Hungary and Poland are notable. Both countries are now paying a significant share of their budgets and GDP for retirement benefits and are unable to finance many needed expenditures notably on improvement in health and education [World Bank, (1998), European commission (2007)].

### 3.2.8. Income Security Gaps to Civil Servants

Civil servants are still facing income security gaps both during their work careers and after retirement. The current pension system ignores short service employees. Any employee who serves less than 25 years receives no pension, although a gratuity might be payable. Employees are entitled to disability pensions after meeting the criteria of at least 10 years of service.

### 3.2.9. Lack of Indexation

Pension benefits are not systematically indexed for inflation. Although retirees receive only half of their pension in annuity form but inflation will quickly erode the purchasing power of pensions. Though occasional increases have compensated pensioners for some of the losses in purchasing power caused by inflation but these occasional increases depend entirely on the will of government. Therefore, employees face further threats to their income security after retirement.

### 3.2.10. Pension Related Obstacles to Job Mobility

The current pension system does not serve the interest of emerging markets. Government employees are facing pension related obstacle to job mobility. They cannot leave their jobs before reaching pension eligibility because of the cost of losing their pensions even if better job opportunities are offered to them. Most of the government employees getting better job opportunities take leave from their government jobs and perform their duties in private sector. Because of this situation both the government and economy at large are worse off.

### 3.2.11. No Private Annuity Market

In Pakistan there is no formal private annuity market. Lack of pension annuities further complicates old age economic security. The insurance companies do offer something but at a very high cost, as they have very high administrative cost [Kanwer et al. (2005)]. Therefore, some incentives are needed to provide equity exposure to the investors at a feasible cost.

## 4. Recent Trends in Pension Reforms[5]

The government of Pakistan is gradually thinking to reform the pension system to reduce government's rising pension bill that has increased enormously during the last several years.
The Pay and Pension Committee of 2001 observed the above issues, and recommended a number of changes to pension system that were later implemented. It recommended that a new Defined Contributions (DC) system should be introduced for new employees. In the year 2002, Cabinet took the decision that a contributory pension scheme be launched for employees entering the service after a set date.

Keeping in view the Cabinet decision, the federal government recognized an Actuarial Office (AO) under the Ministry of Finance (MoF) at the end of the year 2002. The AO took the responsibility of estimating the existing liability of pension payments and suggesting different alternatives to reform the pension system.

In 2004, Government of Pakistan established a special Pension Reform Working Group (PRWG) to assess different proposals and to develop recommendations for reforming the pension system in the country. PRWG consisting of the members from the Ministries and Actuarial Office presented its report to the Pay and Pension Committee in March 2005.

[5] The discussion in this section is partly based on information taken from Kanwer, *et al*. (2005), Raziq (2005), and Hasan. (2005).

On the basis of suggestions of the PRWG, Actuarial Office and Pay and Pension Committee of 2004, the government has now been considering introducing Defined Contributions (DC) scheme for workers who joined the service after 1st July 2006.

Furthermore, parametric reforms were suggested to reform the existing Pension Scheme for the existing employees. The Government of Pakistan took into account these recommendations during the finalization of the Budget proposals for the FY 2005-06. However, government only reduced the commutation percentage by 5%, keeping in view the affordability and other factors.

The existing pensions system, which is also being reformed for the existing employees, is recommended to be withdrawn for future employees to reduce the government pension liabilities. The Pay and Pension Committee pointed out that if the pension reforms were not introduced instantly, the pension bill would rise enormously in the years to come, thus becoming the main burden after defense spending. The pay and pension committee recommended that new employees should be covered under a new Defined Contributory Scheme after which existing pension and commutation schemes would not be available for the new employees.

The previous pay and pension committee had also recommended the eradication of distortions in the pension system. The committee had clearly pointed out that existing pension scheme should be discarded and replaced either by a restructured affordable scheme or by a gratuity scheme.

To reduce the pension cost under the first option it suggested measures like alteration in pension formula, discouraging early retirement, reduction in commutation, discontinuation of the extra benefits given on occupation related disability, suspending the policy of indexing the pension. In the second option, it was suggested that the most preferred alternative, which would significantly reduce the cost, was to replace the pension facility by a gratuity scheme for all existing employees and new entrants in future.

However, Pay and Pension Committee had observed that no serious attempt had been made to take action now in order to prevent the situation from becoming out of control in near future.

While discussing the recent trends in pension reforms, it is worth noting that Pakistan has taken a step forward in pension reforms by introducing Voluntary Pension System. The Security Exchange Commission of Pakistan has designed a new Voluntary Pension System (VPS) under the Voluntary Pension System Rules, 2005. The new Voluntary Pension System is based on several tax incentives and it is also flexible in terms of contribution, asset allocation choice and, above all, portability.

Under the VPS those individuals who are not covered under any pension scheme would also be eligible to save for their old ages. The main argument for the introduction of private pension system in Pakistan is that it provide an option for old-age security to the large number of people that are not covered under any pension scheme. As the contributions into the pension fund are tax free in VPS, the tax inducement in private pension system is expected to boost both investment and saving.

## 5. Key Issues for Reform

The preceding section point out certain limitations of the current pension system and bring some serious issues related to reforms in focus. The deficiencies of the existing pension scheme highlight the need to commence some reformatory steps. The most important is how to compose the reform and what are the critical issues that need to be considered. The following issues come out from the previous discussion.

- Firstly, the instant challenge for Pakistan is to propose and put into practice a reform strategy that can restore the long-run financial feasibility of public pension schemes. There is a need to control rising trend in the expenditure pattern of the defined-benefit, pay-as-you-go, public pension program. Generous pension benefits coupled with health benefits provided to the retirees can threaten the financial sustainability of public pension scheme. A reassessment of the benefit and contribution structures can make certain the fiscal sustainability of the public pension schemes.

- Secondly, without reforms in investment policies, the provident and pension funds cannot provide sufficient replacement rate to elderly people. Moreover policies pertaining to withdrawal of accumulated balances need to be reviewed. The current provision of liberal non-refundable withdrawal often results in insufficient stipulation during old age. Thus, limited withdrawal services coupled with some form of compulsory annuitization is essential for adequate provision in old age.
- The most important issue of extension of coverage to control poverty among the aged population needs to be considered. It is not feasible to move towards a universal, publicly managed social security system covering every citizen attaining old age. There are a number of reasons for this. First, public pension schemes are already under great financial stress due to generous and liberal benefit structure. Second, massive poverty, unemployment, low tax base, and tax evasion entail that capacity and eagerness to contribute in a joint system may have narrow scope in Pakistan.

So, there is a need for adopting a realistic approach to expand pension coverage in Pakistan. This approach basically necessitates a right strategy to strengthen the second and third pillars (the second pillar for mandatory savings and the third for voluntary retirement savings) of pension system. Coverage can be expanded through introducing mandatory, individual account based, defined contribution pension schemes and voluntary retirement saving schemes to enhance the retirement income.

An individual account, in defined contribution system gives significant choices to participants regarding risk exposure. The main advantage of individual account is that the participants consider their account balances as personal wealth. This creates incentives for the individual participants to take interest in governance issues and functioning of the system.

Since individuals make choices regarding risk exposure and the choice of fund manager/investment type, the system necessitates condensed efforts in terms of good governance. Moreover, the system of individual accounts provides security against the political risk that people have to face in pay-as-you-go defined-benefit system. The recent introduction of Voluntary Pension System in Pakistan suggests that Pakistan is moving in the right direction.

## 6. Issues in System Design

### 6.1 Disjointing Fund Management and Annuities

The pay-as-you-go defined benefit pension system results in vertical integration between two activaes

- Fund management in accumulation phase
- Paying annuities in benefit phase

There is strong consensus that these two activities should be decoupled [Shah (2005)]. The main reason for this division is the elimination of assurance about the pension that will be paid in future. Promises about monthly pension payments are made only at retirement date based on the switching of stock of pension assets into flow of annuities calculated on the basis of mortality projections and interest rate that will then prevail. So the key aspect of modern pension design is the seperation of the accumulation phase from the benefit phase. In the accumulation phase the employee requires fund management services from the institution where he is working and in benefit phase the pensioner have need of a life insurance company to sell him an annuity.

Hence, the decoupling of accumulation phase from benefit phase requires a pension regulator that deals with all the problems of pension system, from the date a person start his/her job career until the date that annuity is purchased.

### 6.2 Function of Individual Accounts

An individual account, in defined contribution system gives significant choices to participants regarding risk exposure. The main advantage of individual account is that the participants consider their account balances as personal wealth. This creates incentives for individual to take interest in governance issues and functioning of the system.

As individual makes choices regarding risk exposure and the choice of fund manager/investment type, so the system necessitates condensed efforts in terms of good governance. Moreover, the system of individual accounts provides security against the political risk that people have to face in pay-as-you-go defined benefit system

**6.3 Administrative Cost**

The most important issue with individual account is administrative overhead and transactions costs, especially when contributions or account balances are small [Whitehouse (2000)]. This issue is particularly important in developing countries like Pakistan where average contribution and average account balance would be small. So large transaction cost can adversely and negatively affect the pension accumulation

The OASIS (Old age social and income security) committee had proposed that centralization of recordkeeping, at an agency called Central Recordkeeping Agency (CRA), could yield significantly lower transaction costs [Shah (2005)].

**6.4 Redistributive Feature in Benefits**

The design of pension system should include a redistributive component for individuals who have assets below a certain threshold level. But without having a system of unique citizen identity number, it is not possible to have a redistributive component in pension system of because without having this system individuals would have incentives to open more than one account and received improved benefits.

Once we have this system then it is possible and feasible to think of redistributive mechanism, where the poor individuals in the pension system are provided with the state financial help when they retired with scarce pension asset.

**6.5 Strategy for Premature Withdrawals**

Many low-income individuals in a pension system face credit constraints. So when faced with consumption shocks, they find it reasonable to look for some ways in which pension wealth can be used in consumption smoothing.

A system where there is no restriction on premature withdrawal is not realistic. As in India there is experience employee provident fund (EPF), where withdrawals are permitted. EPF uses a tax treatment where contributions, asset returns and premature withdrawals are all tax-free. This has given an outcome with a high rate of withdrawals [Shah (2005)]. This policy is not desirable.

As for as Pakistan is concerned, government employees have the facility of non-refundable advances from general provident fund to the extent of 80% of their balance in the fund on attaining the age of 45 years and 100% on attaining the age of 50 and 55 years[Raziq (2005)]. Government employees further have the capacity to obtain an advance against their credit in the fund that is to be repaid in installment from their pay. This situation also results in high rate of withdrawals.

Besides, prohibition of premature withdrawal is also not realistic in a country with heterogeneous mortality. So the pension system which forces pension wealth to be illiquid until age 60 will not serve the need of each and every citizen. This situation suggests that the design of pension system for Pakistan should avoid complete illiquidity.

### 6.6 Simplicity in Pension System Design

The issue of simplicity in pension system design is most important due to a large number of unsophisticated users of pension system that we expect in Pakistan. Moreover the design choices that support simplicity are also favorable in terms of lower transaction cost. The goal of simplicity is associated with having a small set of choices with special provisions to make it easy for unsophisticated users to engage in performance comparisons of investment product types and pension fund managers.

### 6.7 Feature of Portability

A key feature of new pension system is portability. There are two levels of portability:

- The first level of portability is related to the movement of an individual between government jobs and non-government jobs.

The pension wealth of the individual should stay with him/her even if he/she leaves a government job and join the other one, government or private.

- The second level of portability is related to shifting of pension accounts across job changes, portability of pension assets across multiple fund managers and investment products.

## 7. Conclusion

In this section we conclude the study and suggest an alternative approach to ovoid the problems associated with pay-as-you-go pension system in Pakistan. The problems that the current system is facing now are as under.

- Rising life expectancy coupled with declining fertility rates are resulting in changes in the age structure of the population. This demographic transition will soon lead to an increase in the proportion of elderly population in Pakistan. Thus the economic burden on the current and future young generations to support their elderly is expected to rise in future.
- The conventional means of support for the elderly through strong inter-generational family ties are also likely to dry up as the joint family system in Pakistan is gradually breaking down.
- The existing pension system in Pakistan has very low coverage and the fiscal resources are collected form broader population to cover pension for the minority.
- The current pension system in Pakistan is highly biased in favor of public sector employees who are treated quite generously in comparison to private sector workers who do not generally have access to any worthwhile old-age security system.
- The pension system for the public sector employees operates as unfounded (pay as you go) system, which places substantial financial pressure on budgetary allocations.
- The payment of commutation without discounting doubles the government's long term and unfunded fiscal liability for pensions. Employers' ability to pool longevity risk is reduced with the practice of commutation, so the cost of pension is increased for the government. This practice also creates hurdles

in reforming compensation package as a whole, e.g. monetizing compensation without revising the structure of commutation would mean that government pension liabilities would explode.

- Efforts to reduce the burden of pensions by early retirement schemes, mostly in the form of the so-called golden handshake schemes, are on the rise in Pakistan. Most of these scheme aim at downsizing the pool of employees in various public sector and semi-government organizations that are up for privatization. This practice has reduced the supply of experienced labor in many professions.
- Uneven pension schemes across sectors and across professions have created unwarranted obstacles to job mobility.
- Properly functioning private annuity market is almost non-existent in Pakistan.

The above-mentioned problems indicate that there is a need to reform the pension system of Pakistan. Fully-funded pension system can help to strengthen the formal channels of retirement savings and can help to get rid of these problems. If the decision to reform the pension system is not taken in time then in the near future rising pension expenditure can be harmful for Pakistan economy on various accounts. The foremost impact will be the increase in pension expenditure, which will in turn lead to increase in indirect taxes, reduction in development expenditure and/or increase in government borrowings. Other consequences include increased inequality among elderly population segmentation of labor between public and private sectors and the resulting incoherence in the society.

Although some efforts to reform the pension system had been made to reduce the government's rising pension bill, yet despite realization of the problem no serious effort had been made to reform the pension system in a fundamental way to avoid the situation from getting out of control in future. Moreover, systematic reforms or a shift to a fully-funded pension system can solve the fiscal problems of pay-as-you-go pension system forever, whereas parametric or minor reforms just postpone the fiscal burden for a short period of time and open the door for additional minor reform in future.

The existing theoretical and empirical literature on efficiency and growth effects of pension reforms indicates that pension system reforms have positive impact on national savings and financial market development, which in turn contribute to long-run economic growth.

## 8. Policy Guidelines

A number of initial conditions need to be in place before a shift from pay-as-you-go to fully funded system can be implemented successfully. These initial conditions include the following.

- There is a need to create an enabling environment for the successful implementation of pension system reform. Awareness about the strengths and weaknesses of pay-as-you-go and fully-funded pension systems need to be created through information dissemination both at intellectual and academic levels.
- There is a need to have at least a small number of sound and well-functioning banks and insurance companies. Pension-fund managers need to be carefully selected based on past performance and current management and services. To minimize the investment risk, international diversification may also be allowed to pension-fund managers.
- Finally, pension system reforms require a strong role of the government. There is a need to develop a regulatory framework to protect pension participants from the whole range of capital markets, insurance, inflation and other risks.
- Above all, further research on the issue needs to be undertaken. The present study is primarily academic in nature. It is hoped that this study will create awareness of the problem and contribute to understanding of the issue among academic circles as well as policy makers. Future research needs to be undertaking with a more practical approach.

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