Options for a Voluntary
Pension Scheme in Bhutan

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Robert Palacios, World Bank
Executive Summary

The Government of Bhutan is considering options for introducing a voluntary pension system. This paper provides policy options in this area.

The rationale for introducing a voluntary pension scheme is twofold. First, a voluntary pension would allow those covered by the NPPF to supplement their retirement income. This is particularly important in the context of recent changes which have reduced the target replacement rate. Second, the vast majority of the workforce is in the informal sector where a traditional mandated scheme is impractical. A well designed voluntary scheme can be part of the solution to the coverage gap in the long run.

The most important criteria for the design of a voluntary pension scheme are (i) the potential for significant take-up of the scheme by workers in both formal and informal sector and (ii) rates of return on these long term savings that generate reasonable pensions. Participation in the scheme will be driven largely through incentives that could include favorable tax treatment and targeted matching contributions. The net rate of return will depend on establishing a good investment policy and introducing an architecture for collection, recordkeeping and investment that keeps costs to a minimum.

A defined contribution scheme can be designed to meet these criteria. A hypothetical scheme could, for example, provide a matching contribution of three percent of wages from employers in the NPPF as well as a matching flat contribution from the Government for informal sector workers with lower incomes. The match for informal sector workers could be set at a level that would result in a target retirement income stream above the poverty line.

The architecture of the scheme would minimize recordkeeping costs and ensure full portability through a centralized record-keeper. Asset management could be contracted by the Government on behalf of informal system participants on a competitive basis. Investment policy would be geared towards balancing risk and returns and diversification of assets including overseas investments. Certain elements of flexibility could be considered such as allowing informal sector workers to contribute varying amounts at different times of the year. Limited portfolio choice could also be provided to allow for different investment horizons and desire for higher/lower returns with higher/lower risk. Finally, there could be a limited number of choices for the amount and form of annuitization at retirement.
Introduction

The Government of Bhutan is considering options for introducing a voluntary pension system. This paper provides policy options in this area.

The paper begins with a brief description of the existing pension schemes in Bhutan. This is followed by a discussion of the rationale for introducing a voluntary pension scheme and the criteria that should be considered for its design. References to the international experience are provided. The fourth section provides an illustration of an approach that would meet these criteria. The last section summarizes.

Pension provision in Bhutan today

In 2002, the Government Employees Provident Fund was restructured into mandatory defined-benefit pension and defined-contribution plan for protection of workers in the government employees (civil service, corporate employees and armed forces) against the loss of employment income in the event of old age, invalidity and death. Post-retirement schemes for these groups consist of Pension, Provident Fund and Gratuity. These schemes cover only about 6% of the total population. While the NPPF manage and administer the pension and provident fund, the employers administer the gratuity scheme. Royal Insurance Corporation of Bhutan manages the Provident Fund scheme for the formal private sector workers representing about 1% of total population. Two Public Ltd Companies, Bank of Bhutan and Army Welfare Project are managing their staff provident fund scheme.

Pension and gratuity are defined-benefit schemes. The employers sponsor gratuity and the pension is financed from the total contributions of 10% of employee’s basic salary received from employers (5%) and employees (5%). The Provident Fund is a defined contribution scheme and the scheme is financed from contributions of 6%-10% of employee’s basic salary received from employers (3%-5%) and employees (3%-5%).

The defined-benefit pension is paid to the retirees upon reaching retirement age and after completing 10 years of contributory period. Originally, it provided pension level of 60% of average civil service wage

1In January 2006, the retirement age was revised as follows: 56, 58 and 60 years according to the categories. 1st category (executive, secretary, director, medical specialist) at age 60, 2nd category (professionals-engineers, doctors, architect heads of the division) at age 58 and 3rd (technicians, clerks) and 4th category (drivers,
up to a ceiling after 31 years of service and adjustments are made in line with the annual civil service salary growth. This formula was revised in 2009 when the accrual rate was reduced to 1.33. By design, the scheme provides higher replacement rates to lower paid persons than to higher paid persons. The defined-contribution provides only lump-sum benefits.

The Government has recognized the need to expand pension coverage beyond the public sector. To this end, the National Pension Act has been drafted to provide legal framework for the old-age retirement schemes. The draft Act proposes Old-age citizens’ pension to provide a minimum income during old-age and occupational schemes in the government and the formal private sectors. The document also proposes Voluntary Savings Schemes to supplement their retirement incomes.

Rationale and criteria for a voluntary pension scheme in Bhutan

Rationale. There are at least three reasons that many countries encourage voluntary pension provision. The most important rationale for providing incentives for people to save for their old age is to try to ensure that they do not suffer a large decline in living standards once they can no longer work. This public policy objective is considered so important that the vast majority of countries have mandated this type of savings. However, the mandated level of savings varies significantly with some countries targeting the replacement rate for an average wage worker at less than 40 percent while others target more than 80 percent. The differences are even larger for workers with higher than average incomes.

The variation in the target replacement rates that are implicit in the mandated schemes is, to a large extent, mirrored by the relative importance of voluntary pensions. As shown in Figure 1 below, those countries that mandate lower replacement rates, mostly Anglophone countries, also tend to rely heavily on voluntary pensions. The high income OECD countries with large mandates tend not to have large voluntary pension schemes. While these countries may not impose mandates, they do incur significant fiscal costs through the tax expenditures that arise from favorable tax treatment. For example, the US spends more than one percent of GDP on tax exemptions related to retirement savings. In these

2 The two most important exceptions to this policy are New Zealand and South Africa. South Africa has a large and well organized voluntary pension system while New Zealand has recently started to try to encourage voluntary pensions through its KiwiSaver plan.

countries, voluntary pensions are a policy instrument aimed at supplementing modest mandated savings schemes.

Figure 1 Private voluntary pensions and public mandated replacement rates in OECD countries


In recent years, the same underlying public policy objective – old age income security – has motivated governments to encourage voluntary pensions for a different reason. Rather than supplementing a mandated pension scheme that covers most of the workforce as in many of the high income OECD countries, developing countries starting from a lower coverage rate have tried to expand coverage through voluntary pensions. This approach is based on the growing recognition of the limitations of traditional pension schemes that have not been able to reach most of the labor force after trying for decades. Important examples in this regard are the schemes aimed at farmers in China and Sri Lanka in the 1990s and the matching defined contribution (MDC) schemes recently launched by several Indian state governments.

An additional reason for policymakers to encourage voluntary pensions is to increase the volume of long term savings in the economy. Some empirical analysis suggests that long term savings can help in the development of domestic capital markets since pension funds have longer term investment horizons.
They can also serve as effective intermediaries for individual investors who may not be able to gather the information needed to make sound investment decisions.

How do these three rationale apply to Bhutan? The capital markets rationale seems less important for two reasons. First, the domestic capital market in Bhutan is not likely to play a major role in economic development or allocation of capital. Second, it would not be in the interest of pension fund members to have most or all pension funds invested domestically. The principle of risk diversification strongly argues in favor of a significant international investment component to pension fund portfolios. Third, a concentrated pension fund sector that owned a significant portion of the country’s capital might result in conflicts of interest in a small country where links between individuals and companies are close.

A more relevant rationale is the desire to supplement or ‘top up’ the mandatory retirement savings generated by the NPPF. The NPPF currently provides a reasonably high replacement rate, but recent changes that have lowered the long run replacement of the scheme. Some workers may want higher replacement rates and would be willing to voluntary contribute to a pension scheme if there were some incentive to do so. Also, for higher income workers, the cap reduces the ultimate replacement rate significantly.

The third rationale for encouraging voluntary pensions – expanding coverage beyond formal sector workers – is especially relevant in Bhutan. As in neighboring India, less than one in ten workers is covered by the mandated pension system and this figure is not likely to increase rapidly. This is due to the difficulty of applying a system of collection of contributions geared to payroll deductions to rural farm and urban self-employed incomes that are very difficult to track. Many people have highly variable incomes, subject to seasonal changes, making traditional collection rules less relevant. Finally, at very low levels of income and depending on the strength of traditional intergenerational support systems, applying a mandate to certain parts of the population (e.g., poor farmers) may actually make them worse off. A voluntary scheme designed to take into account the income patterns of informal sector workers can help address these shortcomings.

Criteria. The case for encouraging voluntary pensions in Bhutan is twofold. First, to supplement the mandate for those members of the NPPF aiming for higher replacement rates and second, to expand coverage to those workers not easily incorporated into the mandated scheme. In order to achieve these two goals however, at least three criteria must be met. (In this, we focus on a fully-funded, defined contribution pension scheme for reasons discussed in the next section.)
The first criterion is simply that workers should want to join the scheme. In other words, there should be adequate incentives available for workers to sacrifice liquidity and tie up their savings until retirement. The most common form of incentive for encouraging voluntary pension savings is favorable income tax treatment. In many countries, pensions are exempted or subject to reduced tax rates at one or more stages – contribution, investment and payout. This may be relevant for the small proportion of the workforce that pays taxes, but for the vast majority of workers in Bhutan this will not be an effective incentive anytime in the near future.

A more useful option is a matching contribution. In some countries, the employer matches the employee’s contribution up to a certain amount or percent of wage. As discussed in Box 1 above, the US Government provides such an employer match for the TSP program. Most matching contributions from employers require a ‘vesting period’, that is a certain minimum period of employment before the employee can leave with the matching contribution.

A variant of this type of incentive can also be applied for informal sector workers. In this case, the government may use a match to increase incentives for voluntary pension coverage. The matching contribution would be specified not as a percentage of wage, but rather as a flat amount or range of nominal values. For example, in the Indian state of Rajasthan, the state government matches 1:1 contributions up to 1000 rupees per year from workers in certain occupational groups known to belong to the informal or unorganized sector. Another example from India is the state government of Andhra Pradesh where women in self-help groups are provided with a matching contribution of 30 rupees per month. A key policy question is what level of matching contributions is required to increase coverage significantly. Unfortunately, there is little research to date to provide much guidance in this respect. What is clear, however, is that these incentives are important to encourage voluntary participation.

The second important criterion is that the funds earn a rate of return that compares well with other investments and ultimately yields a reasonable amount of pension income. The net rate of return for a defined contribution scheme involves two elements – charges and gross returns on assets.\(^4\) Charges are the fees levied by asset managers and can come in various forms. The most common form is a charge expressed as a share of assets under management. In some cases, as in most of the Latin American DC schemes, charges are levied as a share of wages. Other variants include hybrid charge structures and

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\(^4\) The rate of return for a defined benefit scheme is measured by comparing contributions to benefits. This internal rate of return can be calculated based on some assumptions.
charges differentiated according to the type of portfolio chosen. The important point however, is that charges can have an important effect on the terminal balance by reducing the net rate of return. A good pension scheme will keep charges to a minimum. Charges may be especially important in the case of Bhutan given that there are usually significant economies of scale, at least in the management of individual accounts. To the extent that there are scale economies, this would argue against setting up multiple and parallel administering entities for different groups of workers.

The gross rate of return will be determined by the asset mix allowed and the choices made within these restrictions. These choices will also reflect risk tolerance since there is a clear and positive relationship between risk and return. The risk-return tradeoff must be addressed in the investment regulations and requires expertise and well informed decision makers. Even in advanced economies, most workers have relatively little experience with investment and most countries disallow the riskiest investments and otherwise restrict portfolios in some way. Setting portfolio limits requires policymakers to strike a careful balance between risk and return. An overly restrictive investment regime or one that allows for infrequent but large losses to individual accounts could both reduce the attraction of a voluntary pension scheme.

These two factors – incentives and net returns – are the most important determinants of the success or failure of a voluntary pension scheme. In addition, there are several other criteria that should be considered in the design of any pension scheme.

Perhaps the most basic requirement of any pension scheme is that good records of individual accounts are kept. A robust recordkeeping system and one that provides timely information for members must be in place before members can feel confident that their retirement savings are properly accounted. To the extent that reports can be generated on demand or sent on a periodic basis, members’ confidence will increase further. On the other hand, poor recordkeeping can seriously inhibit confidence in the system and represents a large potential liability for the sponsor.5

Individual account management and recordkeeping often involves significant economies of scale. This has led some countries (e.g., India, Sweden and the US in its TSP plan) to unbundle this function and

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5 In 2007, the Japanese government admitted to the loss of millions of pension records in its publicly-sponsored scheme leading to scandal and serious political fallout.
keep it separate from asset management. This may be a particularly important issue in the case of Bhutan given the small scale of operations.\(^6\)

A centralized or at least fully integrated system of recordkeeping allows for portability, another important feature of a well designed, voluntary pension scheme. Workers switching jobs continue to have the same identifier within the pension database and continue to accrue pension wealth in their individual accounts regardless of employer. There is a seamless pension record when moving from informal to formal sector or vice versa, rural to urban areas or when shifting between public and private sector. Portability makes the pension scheme easier to manage for workers and makes the labor market more efficient from the viewpoint of national policymakers.

A few additional considerations can be grouped under the heading of ‘flexibility’. Flexibility can be incorporated into pension scheme design at each stage and is especially important when aiming to expand coverage beyond larger firms and the public sector. Contributions, for example, can be allowed in irregular installments to reflect seasonality and income volatility. During the accumulation stage, members can be given limited portfolio choice to reflect their age, other assets and aversion to risk. Over time, investment options might become more varied to reflect both the growth of the funds as well as greater experience of account holders. Finally, at the withdrawal stage, some flexibility can be provided in terms of the payout mode. Partial annuitization, phased withdrawals and other options may make the scheme more attractive to workers and more practical from an administrative perspective.

The next section provides an example of a scheme that attempts to meet most or all of these criteria.

**Illustration of a voluntary pension scheme in Bhutan**

In the last few years, the Royal Government of Bhutan has received advice regarding voluntary pension arrangements which suggests that the best approach given the conditions in the country is defined contribution pensions. With regard to occupational schemes for formal sector workers, setting up numerous defined benefit (DB) schemes could be costly, limit portability and would be difficult to supervise. Emphasis on DC schemes for the voluntary part of the pension system is reflected in the draft National Pension Act.

\(^6\) The Government of Maldives is also planning to unbundle and contract out recordkeeping and asset management for the 30 thousand or so public sector employees about to enter a new, defined contribution pension scheme in 2010.
As noted above, extending a voluntary pension scheme to informal sector workers poses special challenges that also make a DC scheme more attractive. For example, without a clear reference wage to work with, a defined benefit formula (such as the one used by the NPPF) cannot be applied. Defined contribution schemes also allow for more flexible contributions, both in terms of timing and amounts. Moreover, a DC scheme allows for easy portability between informal and formal sectors. For these reasons, a growing number of countries have opted for DC schemes when expanding coverage to farmers (China) and the informal sector at large (India, Maldives, Dominican Republic, Ghana and others). The following illustration assumes a DC arrangement for voluntary pensions in the case of Bhutan. Each of the key parameters is taken in turn.

**Contributions and incentives.** To begin with, we note that members of the NPPF already participate in a DC scheme. It would be quite simple to add a voluntary tier to this scheme at practically no additional administrative cost. As in the United States, a matching contribution from the Government as employer could serve as the incentive for workers to participate. Similar schemes could be introduced by other employers and matching amounts could even be allowed to vary. However, the same principles of investment, reporting and withdrawal should apply and individual accounts would be completely portable between jobs.

In the case of the self-employed, favorable tax treatment could be provided. However, this would likely apply only to a small group of mostly professionals who are liable for taxes. Those with less than 100,000 Ng would not have any advantage in keeping their savings in this form versus another yet they would have to tie up these funds until retirement. Alternatively, the vast majority of workers in the informal sector – farmers, shop owners, vendors and others – could be provided with a matching contribution by the Government defined as a flat amount per annum. This amount could be determined based on a target pension level for someone that contributed throughout their working lives. Depending on policies regarding non-contributory pensions (ie., citizen’s pensions) this target could be adjusted accordingly (see the discussion in the final section). The overall cost of these programs would have to be calculated to ensure financial sustainability.\(^7\)

\(^7\) Note that the cost of a universal or broad based non-contributory pension would increase as the population aged, but a matching contribution scheme could help offset this cost in the long run if the social pension was allowed to decline relative to incomes over time while the contributory scheme matured and provided more of the overall retirement income. See Palacios and Robalino (2009) for simulations.
What would be a reasonable contribution rate and match for a voluntary DC scheme in Bhutan? A separate set of calculations show that, under reasonable assumptions, a ten per cent contribution could generate an actuarially fair annuity of around 20-25 per cent of the lifetime average wage. Combined with the current DB scheme for civil servants, this would result in an overall replacement rate of around 80 per cent of lifetime average wage for the younger cohorts. Older cohorts would have a shorter period of accumulation in the DC scheme so that their replacement rates would be somewhat lower. In this context, an additional voluntary contribution with a 1:1 match of 3 per cent would raise the total replacement rate to between 90 and 95 per cent of lifetime wage. If all public sector employees participated, the cost would be approximately 0.2 per cent of GDP. Private firms that wish to offer a voluntary pension could have varying levels of matching contributions.

In the case of informal sector workers, it is impractical to define the level of contribution and match in terms of a percentage of salary. Instead, contributions can be specified in terms of minimum and maximum annual values and matching contributions can be made by the Government accordingly. A useful way of setting such values is to specify a target pension level for someone that contributes for most or all of their working life. This period could be arbitrarily set at say, 30 years. The target pension amount would reflect the Government’s view of an adequate minimum income in old age rather than a replacement rate, as in the case of formal sector workers.

As an illustration, the target pension value could be set at 20 per cent of income per capita or approximately 12,000 Ng (US$240 dollars) per annum. Under reasonable assumptions this would require a total contribution of about 1000 Ng (US$20 dollars) per annum over a period of 35 years. If the match were set at a 1:1 ratio, this would result in a Government contribution of roughly 500 Ng per annum per participant. If one third of informal sector workers participated, this would come to approximately 0.1 per cent of GDP. Alternatively, a reduced match of say, 0.5:1 could be implemented at less than half the cost to Government (since participation would be lower as well as the amount of the match). In any case, an assessment of the fiscal implications of such a measure would be required.

Investment returns. The second key factor that would determine the success of a voluntary pension scheme was the net rate of return on investments. In a sense, the matching contribution to the DC accounts ensures that the member is reaping a substantial reward for participating in the scheme. In addition however, it is important that the investment return, after taking charges into account, is
sufficient to achieve the target pension levels the system is designed to produce. The key to achieving this objective involves two things – a sound investment policy and low charges.

A sound investment policy balances risks and returns. This is typically done by diversifying the portfolio and using historical data on returns and volatility to set limits that reflect public policy objectives. In the context of Bhutan, it has proven difficult to diversify investments sufficiently through the local capital markets alone. International diversification seems appropriate given this situation.

The experience of Bhutanese fund management with international investments is mixed, with the NPPF pulling out of foreign markets after suffering severe losses in the US stock market a few years ago. The Environmental Trust Fund (ETF) was recently able to avert large losses during the current crisis by pulling out of foreign equities at the right time. Nevertheless, as these funds continue to grow over time, it will become very difficult to maintain reasonable risk-adjusted returns without international investment.

An interesting example of a small country with a large and growing pension fund is Botswana. With around 90 thousand civil servants, Botswana began a defined contribution scheme for civil servants in 2001. There is also a significant voluntary DC scheme covering a large share of the private sector labor force. Some of the fund was invested in long term government bonds, but as much as 80 percent was invested abroad, mostly in neighboring South Africa. This strategy has proven successful so far and allowed the fund to diversify its asset base in a way that would not have been possible if restricted to the domestic market.

**Charges.** Administering a pension scheme involves several costs. The collection of contributions, the maintenance of individual account records and the investment of the fund are the three most important. What appear to be small differences in administrative costs can significantly change the ultimate balance at retirement when these costs are passed onto the scheme’s members. This makes it imperative to find efficient ways of minimizing costs and charges.

Many DC schemes, especially in Latin America and Eastern Europe, mandate specialized firms to perform the last two functions and sometimes all three. There is increasing evidence that especially in recordkeeping, there are significant economies of scale. Larger countries with hundreds of thousands or even millions of members may be able to afford to take this kind of approach, but even there, some argue that the tradeoff between competition and cost is not favorable to members due to higher charges (and lower net returns).
Several countries have decided to unbundled these functions in order to reduce costs. Sweden for example, uses its tax administration to collect contributions to its DC scheme and has a central record-keeper. Asset management is decentralized, allowing for competition to take place in that area. India has also unbundled these functions in its New Pension Scheme (NPS). A Central Recordkeeping Authority (CRA) has been contracted by the Government to handle all of the individual account recordkeeping while multiple asset managers compete through a bidding process. The architecture of this scheme would be particularly relevant to Bhutan if it aims to provide pensions to civil servants on a mandated basis and the informal sector on a voluntary basis.

In view of the small scale of the potential membership in Bhutan (perhaps a few hundred thousand contributors in the long run), it would seem advantageous to maintain a central record-keeper that could operate with the economies of scale possible and keep costs low. An added advantage of a centralized system is that it should facilitate portability when workers move from one job to another or between formal and informal sector employment.

An important element in attracting informal sector participants, and especially those living in remote locations, is keeping contribution collection costs low. These costs are not just those of the pension fund administration, but also include those that the participant has to bear in order to make his or her contributions. This topic is related to the broader subject of financial inclusion and access. For example, the kind of mobile banking solutions available could also be harnessed to facilitate contribution collection from rural and remote areas.

**Additional considerations.** In addition to the critical elements of a new DC scheme described above, a secondary set of design features corresponding to each stage of the DC process could be considered under the broad category of ‘flexibility’. Contributions from informal sector workers could be more flexible than those working for formal sector employers. So, for example, a quarterly or even bi-annual contribution from farmers or workers in rural areas could be allowed subject to certain minimum levels.8

**Portfolio choice.** Many countries allow members of DC schemes to choose their investment portfolio. The range of practices is large with some countries like Australia, the US (401k plans) and Sweden allowing a huge variety of investment options while others, such as Hungary or Peru insisting on a ‘single

8 A separate important topic is the mode by which these contributions could be made. This topic is related to the broader subject of financial inclusion and access. For example, the kind of mobile banking solutions available could also be harnessed to facilitate contribution collection from rural and remote areas.
portfolio’. The advantage of allowing choice in this area is that individual tastes for risk and investment horizons vary. Some workers may be willing to cope with account balances that go up and down year to year in order to get a higher return in the long run. Others, particularly those close to retirement, may find this tradeoff is not worthwhile and prefer a very conservative portfolio.

There are two major disadvantages with portfolio choice however. First, allowing too much choice to investors with little understanding of experience could result in disappointment or, in the extreme case, could compromise the public policy objectives of achieving a reasonable retirement income. Too much choice has been shown to confuse investors even in countries where the population would be expected to have reasonable financial literacy. In India, the NPS was designed to allow for very limited choice. Contributors can choose from three options – a conservative, balanced or aggressive portfolio. Within these three groups, care was taken not to allow for extremes so that the maximum equity share in the aggressive portfolio option is 50 percent.

Portfolio choice also makes the scheme more difficult to administer and increases cost. While it is difficult to quantify this effect, more choices require more administrative processing, information and reporting. These costs are likely to be even more important in a small scheme as in the case of Bhutan.

For these reasons, only limited portfolio choice seems appropriate in the case of Bhutan. This could be phased in over time as assets grow and administrative systems prove to be robust with a single portfolio environment. As in Mexico, the first expansion of choice might be the addition of a conservative option (mostly fixed income) for individuals approaching retirement age.

Benefit Withdrawals. The final stage of the DC process is the withdrawal of the accumulated pension balance. This can be done in a variety of ways. At one extreme is the case of a lump sum payout at the time of retirement. In contrast, mandated annuitization of the entire balance could be made a condition of the scheme. Both are observed internationally, but many countries opt for some degree of flexibility between these extreme cases. For example, India’s NPS mandates that 40 per cent of the

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9 In the US, for example, researchers have shown that when employers offer dozens of options, workers tend to opt for a default due to their inability to determine which is best. In Sweden, there were hundreds of mutual funds offered resulting in lack of choice as workers were overwhelmed.

10 The NPS in India has not been fully implemented so there has not been any experience with portfolio choice to date.

11 In this paper, we do not address how annuities would be provided. There are practical alternatives if the cost of outsourcing annuitization to insurance companies is too high including government provision or programmed withdrawals. The latter mimic annuities to a certain extent but investment and demographic risk are borne by individuals.
balance must be annuitized at age 60. In Chile, an annuity must be purchased so as to provide at least a minimum stream of income in old age which has been predetermined.

**Combining design features.** When we combine the various parameters of scheme design just discussed, we can envision a hypothetical voluntary pension scheme for Bhutan with the following characteristics:

- Defined contribution with complete portability across sectors
- Incentives
  - Favorable income tax treatment up to certain limits
  - Employer matching contributions on a voluntary basis
  - Government matching contributions for low income workers up to a certain limit
- Investment portfolio with diversified assets (including international); limited portfolio choice introduced in the medium term
- Central record-keeper for individual account management and reporting
- Partial annuitization to meet a minimum income criterion set by Government

This approach, if successful, would result in an increase in pension coverage, pension savings and eventual retirement income. Based on the matching contribution assumptions described above, the cost to the Government would be relatively modest at around 0.2-0.3 per cent of GDP, depending on what proportion of workers decide to contribute. Whether this cost is reasonable as compared to other priorities is a question beyond the scope of this note.

However, even within the scope of pension policy, there could be a tradeoff between two types of solution to the coverage gap. Voluntary, contributory pensions are unlikely to ever cover everyone, especially the poor who are not in a position to save. They will also do nothing to help the current elderly population who do not have time to accumulate savings. In order to take a holistic view of pension provision in Bhutan and in light of the existing proposal to introduce a non-contributory or citizens’ pension, we next consider the possible implications of such a scheme.

**Implications of a citizen’s or ‘social pension’**

The coverage gap will still remain even if a voluntary pension scheme reaches a large share of the workforce. Some households will be too poor to contribute, even with a subsidy and others will not
accumulate significant savings in such a scheme before they reach old age. In these cases, a non-contributory scheme is the most effective tool for providing a minimum income to the elderly.

As an illustration, the cost of a hypothetical pension paid to all elderly Bhutanese has been presented in the figure below. There are four cases: The most expensive case is where the age of eligibility has been set at 60 and the benefit level has been set at close to one third of income per capita. The cost as a share of GDP rises from around 1.7 to 2.5 per cent over the next three and a half decades. The least expensive policy where eligibility is at age 65 and the benefit is only 15 per cent of income per capita, costs about one third of this amount or around 0.5-1 per cent during the projection period. Not shown here is the cost of targeted social pension as opposed to a universal pension. Targeting could be difficult, especially in the short run, since at present there is no mechanism for determining who would be eligible. One possible approach that would reduce costs marginally and is administratively feasible, would be to apply a pension offset whereby social pensions were reduced by some proportion of NPPF pensions received. This approach is being used in the Maldives presently.

**Figure 2 Illustration of cost of social pension scheme with different parameters, 2010-2045**

![Graph showing the cost of social pension scheme with different parameters](image)

Source: Authors’ calculations based on World Bank demographic projections.

How would the introduction of the CP affect the voluntary pension scheme? First, if the CP were to be universal, it would clearly help address those significant elements of the population who are too old or
too poor to take advantage of the voluntary pension program. Second, it might create a small disincentive at the margin for individuals to participate in the voluntary scheme since they do have some safety net in old age through the CP. On the other hand, participants in the voluntary pension scheme would be able to attain income levels significantly above the poverty line through the combination of both benefits.

As the population aged, the cost of the CP would rise. This demographic ageing would take place at the same time as the voluntary scheme started to mature, three or more decades into the future. In this context, the success of voluntary scheme coverage could ease the financial pressure coming from the CP by allowing a tightening of eligibility conditions. In other words, if substantial pension income was being generated by the mandatory and voluntary schemes, income testing or a pension offset could be applied so as to reduce the cost of the CP. In a sense, the matching contributions for the voluntary pension scheme would prepay part of the liability that would otherwise arise from the CP.

Figure 3 below graphically portrays the combination of the three elements of the overall pension system – the mandated NPPF, the voluntary pension and the citizen pension. In the long run, the formalization of the economy should result in a further expansion of the voluntary pension system, reducing dependence on the citizen pension at the point that Bhutan’s population begins to age significantly.

Figure 3   Illustration of possible expanded pension system in Bhutan