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India’s pension business has immense potential to grow due to the fact that a large segment of its population has no access to a retirement fund. It has attracted wide attention from the global community due to the reforms initiated by the Government of India. The passage of the PFRDA Act by the Parliament signals a paradigm shift in the way the pension system will be regulated in the country. Global experience shows that the pension regulations become complex and focused as the pension system matures. In India, due to the absence of a comprehensive social security system funded by the Government, it is the collective responsibility of the nation that citizens have access to the information and infrastructure to prepare themselves for their old age. Pension providers and fund managers, as key stakeholders in the pensions business, have the responsibility to provide appropriate services to their customers while adhering to the regulations. The conversion of Defined Benefit plans to Defined Contribution plans has helped employers de-risk themselves, but this has transferred the risk to the members of the plan. It is of utmost importance that members of Defined Contribution plans understand the risks and their impact, and have access to possible options to mitigate these.

India’s pension sector is very important for the growth of the country’s economy since pension funds can support funding of long-term infrastructure projects, bring stability in capital markets and help its elderly population to be financially independent. Given the state of the industry today, a concerted effort from all the key stakeholders is required to bring in global practices (as appropriate in India’s environment). It is time to institute fundamental changes in the functioning of the pension industry to address the issue of security in old age. While the industry needs to find innovative solutions, the regulator may like to develop a long-term vision for the industry, and the Government needs to facilitate development of a conducive environment for the industry to flourish. To develop the long term pensions market, it is imperative that the government and the regulators put together a concerted effort in encouraging and developing the long term asset market. With the right assets available in the market for long-term risk free investments, the pension providers will be in a position to develop and distribute appropriate pension products. Parallel with the development of the right investment options for pension funds, regulators need to encourage and attract stable pension funds to provide suitable pension vehicles to the population at large. All the stakeholders need to work together to lead the industry toward a sustainable profitable growth in the future.
The PFRDA Act passed by the Parliament is a watershed event for the pensions industry. The stage is set for better governance of retirement plans in India and boost people’s confidence that their monies/ contributions in pension plans will be professionally managed. The pensions business in India presents an attractive opportunity because of changing demographics in our country, the lack of a robust pillar one pensions system, and the presence of a vibrant insurance and funds management sector.

The current retirement funds corpus is expected to be in the range of INR 12,000-15,000 billion. Almost one-third of the corpus is in the Employees Provident Fund, which is the principle source of retirement planning for workforce in the organized sector. By 2030, 12% of India’s population will be in the age bracket of 60+ years, which translates into ~ 180 million people. Because of the sheer numbers, this will be a very large population – much larger than the population of many developed countries.

From a global perspective, pensions systems are key drivers of the infrastructure sector and provide stability in capital markets because of the long-term outlook of pension funds. Pension funds constitute 160% of the Netherlands’ GDP, as compared to 11% for India. FDI permitted through the PFRDA Act is expected to help in bringing appropriate global practices to India.

Management of inflation, longevity and investment risks is important for plan members and pension providers. The sector requires the expertise of actuaries in designing, pricing and risk management of pension plans. The pensions business provides an opportunity for insurers to pool mortality and longevity risks, for fund managers to provide adequate returns and for distributors to reach out to the masses who have no access to retirement plans.

In terms of distribution channels, a fundamental rethinking of conventional distribution models is required to increase accessibility to pensions, especially in rural areas. Ideas such as auto-enrolment through the banking/post office system, which could also give a huge boost to the system, have been explored in this study.

To address the needs and wants of customers, pension providers need to communicate with the masses effectively. According to the Global Consumer Insurance Survey conducted by EY in 2012, almost 50% of consumers rate service quality as not meeting their expectations. Pension providers should strengthen their communication-related efforts to take full benefit of prevailing pension schemes. Furthermore, it has emerged that 74% of Indians actively research life and pension products before buying them. A national level literacy campaign regarding the importance for old-age savings would add significant value in the current scenario.

The final section of this report discusses policy, regulatory and business-level solutions. In it, we explore a variety of practical remedies for building a stronger pension system. This includes increasing the focus on Governance, Risk & Compliance (GRC), coordination among regulators in the country (as well as with regulators abroad), effective management of inflation and longevity risk by insurance companies, cross-border movement of retirement funds and the role of regulators in supporting customers and sellers through appropriate guidelines and regulations.
The pension sector plays an important role in the growth of the economy. The current state of the sector has been assessed in this section by estimating the size of the retirement funds corpus, discussing changes in regulations in recent times, and considering the profile of retirement benefit plans and role of insurance companies/mutual funds.

Retirement funds corpus

The current retirement funds corpus is expected to be in the range of INR 12,000 billion. Since some pension schemes e.g., Central Government, coal miners, and seamen’s pension funds, mutual fund pension plans, are not included in the estimates shown below, the estimated fund corpus could be close to INR 15,000 billion.

Almost one third of the corpus is in the Employees Provident Fund, which is the principle source of retirement planning for workforce in India’s organized sector.

<table>
<thead>
<tr>
<th>Retirement funds</th>
<th>Size of corpus (as on 2012) (INR billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPFO</td>
<td>5,461</td>
</tr>
<tr>
<td>Private Pension (BSE Top 100)*</td>
<td>3,600</td>
</tr>
<tr>
<td>Life Insurance/Annuity</td>
<td>2,367</td>
</tr>
<tr>
<td>Public Provident Fund</td>
<td>360</td>
</tr>
<tr>
<td>National Pension System</td>
<td>151 (351 as on 2013)</td>
</tr>
<tr>
<td>Total corpus size</td>
<td>11,939</td>
</tr>
</tbody>
</table>

* Liability estimate, which may not be fully funded
Any pension system comprises a three-pillar system – pillars one, two and three. Pillar one is funded by the Government, pillar two is sponsored by employers and pillar three is self-funded by citizens.

### Pillar One

India lacks a robust pillar one system. However, for people at the lower end of the economic strata, there are several central and state government-run means-tested, targeted, social assistance programs and welfare funds. These constitute India’s pillar one schemes, in which the pension benefit is minimal. The pillar one pension benefit does not reach the intended recipients due to the inefficiency of the benefit distribution mechanism.
Pillar two and Pillar three

Pillar two systems are well-established because of the legislation on Gratuity and Provident Fund. However, Pillar three is in a nascent stage. The insurance products, mutual funds, public provident fund, personal annuity, NPS and any other personal savings for retirement constitute the third pillar of the pension system.

Snapshot of current pension schemes in India under Pillar two and Pillar three is shown below:

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Retirement benefit schemes</th>
<th>Mandatory</th>
<th>Category</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Services Civil Pension</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined benefit</td>
</tr>
<tr>
<td>2</td>
<td>General Provident Fund</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>3</td>
<td>Contributory Provident Fund</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>4</td>
<td>Employees Provident Fund</td>
<td>Yes, subject to salary limit</td>
<td>Pillar two</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>5</td>
<td>Employees Pension scheme</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined benefit</td>
</tr>
<tr>
<td>6</td>
<td>Public sector bank pensions</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined benefit</td>
</tr>
<tr>
<td>7</td>
<td>Seamen's provident fund</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>8</td>
<td>Coal miners pension and provident fund</td>
<td>Yes</td>
<td>Pillar two</td>
<td>Defined contribution/ defined benefit</td>
</tr>
<tr>
<td>9</td>
<td>Employer Trust Funds</td>
<td>No</td>
<td>Pillar two</td>
<td>Defined contribution/ defined benefit</td>
</tr>
<tr>
<td>10</td>
<td>Group super annuation schemes</td>
<td>No</td>
<td>Pillar two</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>11</td>
<td>Public Provident Fund</td>
<td>No</td>
<td>Pillar three</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>12</td>
<td>Unit linked pension plans</td>
<td>No</td>
<td>Pillar three</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>13</td>
<td>Mutual pension fund plans</td>
<td>No</td>
<td>Pillar three</td>
<td>Defined contribution</td>
</tr>
<tr>
<td>14</td>
<td>Personal Annuity</td>
<td>No</td>
<td>Pillar three</td>
<td>Defined contribution/ defined benefit</td>
</tr>
</tbody>
</table>
Details of the schemes enlisted under pillar two are mentioned below:

**Central Civil Services Pension (Pension Rules 1972)**
This is an unfunded, defined benefit, pay-as-you-go scheme. Employees of the Central Government, recruited prior to 1 January 2004, are eligible. Ten years of qualifying service is required for an employee to gain monthly pension rights. The various benefits of this scheme include a maximum monthly pension of 50% of an employee’s average basic pay in the last 10 months of his or her service. Survivor pensions, subject to a minimum qualifying period of service of one year, and disability pensions, subject to the cause of disability being work-related, are also payable. Pensions are indexed to wage and price movements.

**General Provident Fund**
This is a voluntary defined contribution scheme, with an administered rate of return paid by the Government. Permanent employees of the Central Government (recruited prior to 1 January 2004) are eligible for the scheme. The benefits include lump-sum payment of contributions and interest at retirement or earlier, provided employees have completed 20 years’ service. Premature withdrawal is permitted for specified purposes such as marriage and education related expenses. Death related benefits are equal to the average of the last three years’ accumulation, subject to a limit of INR 60,000.

**Contributory Provident Fund (CPF)**
This is a defined contribution scheme with an administered rate of return paid by the Government. It is applicable for permanent government employees and those of departments, offices and organizations where CPF rules apply. The benefits are the same as that of the General Provident Fund.

**Employees Provident Fund**
This is a defined contribution scheme with an administered rate of return, and is managed by the Employees Provident Fund Organisation (EPFO). Administered rates are usually higher than the actual earning rate of EPFO investments. Interest is credited to members’ accounts annually. Once employees become members, they must make compulsory contributions during any subsequent employment in an EPFO-covered establishment, irrespective of salary amount. The benefits include lump sum payment of contributions and interest at retirement.

**Employees Pension Scheme**
This is a defined benefit scheme with fixed contribution and pension rates. The benefits include full pension from the age of 58 or earlier in the event of permanent disability or death. An early retirement benefit option from the age of 50 is available with a reduced rate of pension. One-third of the pension value may be commuted to draw a lump sum amount at retirement. Monthly “family pension” is payable to the family in the event of the death of an employee.

**Public Sector Bank Pension**
This is a defined benefit scheme. The minimum qualifying period is 10 years of service. The benefits include monthly pension after retirement, with a pension commutation option available. Survivor pensions are also payable in cases where the deceased has completed at least one year of qualifying service, but the payment period is limited to the lower of seven years or the number of years between the date of death and the year in which the deceased would have turned 65.
Seamen’s Provident Fund
This is a defined contribution scheme with an administered rate of return. It is a plan for seamen in the Indian Merchant Navy. Benefits include the lump sum of contributions and interest on retirement. Premature withdrawals are permitted for specified purposes.

Coal Miners Pension and Provident Fund
This is a defined contribution with an administered rate of return, whereas the pension scheme is a defined benefit with a fixed contribution and pension rate. It is a plan for the employees of coal mines. The benefits of the provident fund are the same as those of the Seamen’s Provident Fund. The benefits of the pension scheme include maximum pension, based on salary on exiting an organization after 20 years of qualifying service. The disability pension amounts to 25% of average salary and the survivor pension to 60% of the retirement pension value of the deceased, in addition to ex-gratia payment of INR 5,000 to the families of those who die while in service.

Employer Trust Funds
These are either defined benefit or contribution schemes (Provident Fund or superannuation funds). The eligibility of employees is based on the voluntary plans put in place by their employers for them. The benefits include a lump sum payment on retirement with mandatory “annuitization” of two-thirds of the accumulated amount.

Group Superannuation schemes
These are defined contribution plans offered by life insurance companies. The benefits provided are the same as those of the superannuation funds created as employer trust funds.

The evolving third pillar
In India, pillar three includes PPF and the individual pension/annuity plans offered by life insurers, Mutual Fund pension plans and the National Pension system (NPS) for non-government employees and any other personal savings of individuals for after retirement. NPS for non-government employees was a landmark initiative undertaken to strengthen pillar three system. A brief description of this is given below:

National Pension System (for non-government employees)
The NPS is a defined contributory pension scheme introduced by the Government of India, making it mandatory for all Central Government employees with effect from 1 January 2004. The government-authorized PFRDA is mandated to offer NPS on a voluntary basis to all Indian citizens, including workers in the unorganized sector. NPS has been available to all Indian citizens, other than government employees already covered under it, with effect from 1 May 2009.

The NPS is an important milestone in the development of a sustainable, efficient and well-defined contribution pension system in India.

It has the following broad objectives:

- To provide old-age income
- Provide safe and reasonable market based returns over the long term
- Extend old age security coverage to all Indian citizens
PFRDA has established the institutional framework and infrastructure required to administer the NPS for government employees as well as other Indian citizens. Various Intermediaries such as the Central Recordkeeping Agency (CRA), Pension Fund Managers (PFMs) for professional management and investment of subscribers’ funds, Points of Presence (POPs) for distribution of products, trustee banks, custodians and the NPS Trust have been appointed to service subscribers of the NPS.

**Public Provident Fund**
This is a funded and defined contribution scheme with an administered rate of return. It is offered to individual investors without restrictions. The benefits include total accumulations that can be withdrawn after 15 years of service. Partial withdrawals are possible after five years. Only one withdrawal per year is permitted. The 15-year period may be extended by rolling over accumulated balances for further periods of 5 years.

**Unit-linked pension plans and annuities**
Pension products offered by life insurance companies at present can be classified into three types of products:

- Accumulation
- Immediate annuity
- Deferred annuity

Accumulation products provide a corpus on maturity, which is a lump sum amount that is similar to an endowment product. Annuities provide a regular income for life or for a certain period.

Some examples of annuity products:

- Annuity with a uniform rate – payable for life
- Annuity payable for 5, 10, 15 or 20 years or for as long as the annuitant is alive
- Annuity for life with return of purchase price if annuitant dies during the term
- Annuity payable for life, increasing at a simple rate of interest per annum
- Annuity for life, wherein 50% of it is payable to spouse during his/her lifetime on the death of the annuitant
- Annuity for life wherein 100% of the annuity is payable to spouse during his/her lifetime on the death of the annuitant (The purchase price is returned on the death of the last survivor)

**Mutual Fund Pension plans**
These are defined contribution schemes and are typically open to subscribers who are at least 18 years old. The benefits include a choice between full redemption of accumulation on attaining the age of 58, partial withdrawal on retirement or a systematic withdrawal plan.
Role of insurance companies

The insurance sector plays an important role in provision of pensions. Insurance products help customers accumulate savings for their retirement, and on retirement, annuity products convert lump sum funds into regular income. Furthermore, insurance companies accept and pool risks. Pension plans offer an opportunity to the life insurance companies to manage their longevity and investment risk.

The contribution of premiums from annuity and pension products constitute ~25% of the total life insurance business. However, annuity and pensions (as a percentage of the total business) have declined in recent years due to changes in regulations.

A segmental analysis of the insurance business indicates that group products account for the bulk of the pension and annuity business. Individual pension schemes are not very significant because of lack of awareness about them.
Pensions business: share of individual business

Individual (56.5%)
- Traditional 42.8%
- Unit linked 13.6%
  - Single Premium 9%
  - Regular Premium 33.8%
- Single Premium 7.1%
- Regular Premium 6.5%

Pensions business: share of group business

Group (43.5%)
- Traditional 41.5%
- Unit linked 2.1%
  - Single Premium 29%
  - Regular Premium 12.5%
- Single Premium 0.1%
- Regular Premium 2%

Source: Insurance Regulatory and Development Authority (IRDA)
Role of mutual funds

Mutual funds have begun offering schemes that are hybrid in nature and offer investment options in their debt and equity components. Investors can be exposed to equity, based on their risk appetite, but a heavy exit load on pre-withdrawal and taxation of returns make these plans relatively unattractive. Furthermore, there are a limited number of schemes that are currently offered by mutual funds. Today, assets under management in the mutual fund pension scheme category are limited to around INR 13 billion, which is a small fraction of the current market size (~0.1%).

- India does not have a comprehensive social security system
- The insurance sector’s sale of pension products has declined after the notification of the IRDA’s regulations in 2010
- Current schemes mainly cover organized sector workers, leaving the bulk of the workforce with no access to a formal system providing a secure income plan for their old age
- Availability of appropriate long term assets for pension funds’ investments is an issue that needs attention from all stakeholders
The pressing need for pensions in India is primarily driven by the following factors:

- Changing demographics and evolution of nuclear families
- Largely uncovered informal sector workers
- Large section of population in the category of above 60 years
- As per the UN report, population above 60 years expected to reach 180 million by 2030, whose post retirement needs will need to be addressed
- Rise in life expectancy clearly a source of grave concern due to people being expected to live longer after retirement, with an increasing gap between required and expected income due to high inflationary expectations
- Inadequacy of expected income after retirement:
  
  According to EY’s estimates, for a person earning INR 1 million per annum at the age of 30 and retiring at the age of 65 years, the retirement corpus would cover expenses after retirement for another 8 years only, whereas he or she can be expected to live much longer (around 16 years or more) according to current life expectancy rates. Furthermore, the annuity income would barely cover half the expenses after retirement.

The following section discusses the future of the pensions business in India and looks at various growth drivers. EY estimates that the investment corpus in pension sector should grow to more than US$1,000 billion by 2025.

A. Demographics and culture

1. India is ranked the second in the world in terms of its population, with 1.21 billion people (according to the 2011 census). This is around one-sixth of the world’s population. India is expected to be the world's most populous country by 2025, outstripping China, according to a UN report, “World population prospects”, published in 2012.

2. More than 60% of India’s population in the age group of 15-59 years. This is a demographic dividend of which the country is proud. However, at the same time, the percentage of its population that is above 60 years is increasing every year due to improved longevity, driven by an enhanced focus on health care, rising income levels and a better standard of living in the country.

Population distribution (percentage) by age group

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 0-14</td>
<td>38%</td>
<td>35%</td>
<td>29%</td>
<td>25%</td>
<td>24%</td>
</tr>
<tr>
<td>Age 15-59</td>
<td>56%</td>
<td>57%</td>
<td>63%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Age 60+</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
<td>11%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Population Census of India (various years)
3. By 2030, 12% of India’s population will be in the age bracket of 60+ years, which translates into ~ 180 million people – a very large population that is higher than that of many developed countries.

4. As shown in the graph below, the growth rate of the elderly population in India is higher than its general population. This makes the trend of gradual ageing of its population similar to what is observed in other countries. China plans to relax its one-child policy to mitigate the impact of an ageing population.

5. Pension coverage in India being below global standards, it will be challenging to meet the financial security needs of such a burgeoning population.

**Employment in formal and informal sectors (in million)**

<table>
<thead>
<tr>
<th>NSS round</th>
<th>Total employment</th>
<th>Formal Sector workers</th>
<th>Informal sector workers</th>
<th>Percentage of formal sector workers</th>
<th>Percentage of informal sector workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>55th round (1999-00)</td>
<td>396.8</td>
<td>54.2</td>
<td>342.6</td>
<td>13.66</td>
<td>86.34</td>
</tr>
<tr>
<td>61st round (2004-05)</td>
<td>457.5</td>
<td>62.5</td>
<td>395</td>
<td>13.66</td>
<td>86.34</td>
</tr>
<tr>
<td>66th round (2009-10)</td>
<td>459.0</td>
<td>122.6</td>
<td>336.4</td>
<td>26.71</td>
<td>73.29</td>
</tr>
<tr>
<td>68th round (2011-12)</td>
<td>472.9</td>
<td>136.5</td>
<td>336.4</td>
<td>28.86</td>
<td>71.14</td>
</tr>
</tbody>
</table>

Source: NSS & NCEUS

6. The figures in the table above indicate that employment in formal sector still accounts for 29% of the working population, who are covered under pillar two. Consequently, 71% of the population (mainly comprising informal sector employees) does not have a reliable post-retirement support system.
7. According to UNFPA’s report, life expectancy at the age of 60 years is increasing due to multiple factors including improved medical facilities, increased personal income and access to health facilities etc., as shown in the graph below:

**Trends in life expectancy at the age of 60 years**

![Graph showing trends in life expectancy at the age of 60 years](image)

Source: UNDESA, Population Division (2012), UNFPA

**Percentage of elderly population by their economic dependence**

![Graph showing percentage of elderly population by their economic dependence](image)


8. The graph above captures the extent to which the elderly population is dependent on their children/wider family. Nearly 70% of rural and urban elderly females are fully dependent. In contrast to females, elderly males are in a better position, since more than half of them (51%) in rural and (56%) in urban populations are not dependent on others.
9. The two graphs above indicate that the majority of elderly men in rural and urban areas have living spouses, whereas elderly women are less likely to have them. This makes elderly women in rural and urban areas vulnerable in terms of social security and financial stability. This is driven by the fact that women are expected to live longer than men. Therefore, it is more likely that women will be alone in their later years. Given their limited involvement in the financial affairs of their families, and the fact that women’s literacy rate is lower than men’s, it is expected that a social security system will address the needs of elderly women and they will need to be supported by independent professionals who can give them the right advice.
B. Future of pensions business in India

Some future growth drivers of the pensions business are listed below:

- Growing elderly population
- A move from “Defined Benefit” to “Defined Contribution,” which implies that pension schemes are fully funded
- IRDA’s focus on developing the micro-insurance sector, wherein lies an opportunity for micro-pensions
- Saving-related inclination of Indians, coupled with their economic growth
  
  (According to a World Bank Report, average gross savings as a percentage of GDP~ 30%)
- Urbanization leading to nuclear families, which means that elders are less likely to have the support of their children

A typical savings mix pattern for an average Indian over the years:

- From the graph above, we observe that a bank Fixed Deposit (FD) is the preferred mode of savings in India. However, gradually, pension and provident fund savings are gaining importance, due to higher economic growth rate in recent years.
Estimated future size of different market segments:
Retirement fund corpus

Estimated size of the retirement fund corpus in 2025 is shown below along with assumptions

<table>
<thead>
<tr>
<th>Estimated market size of different segments (INR Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Provident Fund</td>
</tr>
<tr>
<td>Life insurance/Annuity</td>
</tr>
<tr>
<td>EPFO</td>
</tr>
<tr>
<td>Private pension (BSE Top 100)*</td>
</tr>
<tr>
<td>National Pension Scheme</td>
</tr>
<tr>
<td>Total estimated size of corpus @ 2025</td>
</tr>
</tbody>
</table>

---Liability estimate of retirement plans that may not be fully funded

Assumptions used in market size projections

<table>
<thead>
<tr>
<th>Schemes</th>
<th>Growth rate</th>
<th>Remarks on growth rates taken</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPF</td>
<td>15.43%</td>
<td>(historical estimate)</td>
<td>India post annual report</td>
</tr>
<tr>
<td>EPFO</td>
<td>Employees Provident Fund</td>
<td>17.03%</td>
<td>(historical estimate)</td>
</tr>
<tr>
<td>EPFO</td>
<td>Employees Pension Fund</td>
<td>14.22%</td>
<td>(historical estimate)</td>
</tr>
<tr>
<td>EPFO</td>
<td>Employees Deposit linked Insurance</td>
<td>14.2%</td>
<td>(historical estimate)</td>
</tr>
<tr>
<td>NPS</td>
<td>15%</td>
<td>Conservative estimate – newly launched scheme—in high initial growth phase currently</td>
<td>Business Standard dated 15/11/2013</td>
</tr>
<tr>
<td>Annuity</td>
<td>21%</td>
<td>(historical estimate)</td>
<td>IRDA</td>
</tr>
<tr>
<td>Private pension (Top 100 BSE firms) – may not be fully funded</td>
<td>10%</td>
<td>(conservative estimate)</td>
<td>Tower Watson <a href="http://articles.economictimes.indiatimes.com/2013-05-15/news/39281883_1_towers-watson-india-director-employee-benefits-liabilities">http://articles.economictimes.indiatimes.com/2013-05-15/news/39281883_1_towers-watson-india-director-employee-benefits-liabilities</a></td>
</tr>
</tbody>
</table>

- According to EY, the pension corpus in 2025 will be nearly INR 83,000 billion
- The CAGR is expected to be around 16% per annum
- This excludes Central Government pensions, Seamen’s Provident Fund, micro pension, Coal Miners’ fund, employer pension schemes, etc.
- Therefore, the corpus size is likely to be much higher than our estimate
- This translates into a pension management fee market size of INR 30 billion growing to more than INR 200 billion in 2025 (assuming average fund management charges of 0.25% per annum)
- Furthermore, according to EY’s estimates, gratuity payments are expected to aggregate to INR 42,315 billion, assuming an average outgo of INR 3,00,000 per employee in formal sector
The presence of appropriate regulations in pension systems plays an important role in ensuring compliance with practices, which are in the best interests of customers and facilitate the development of the industry. In this section, we discuss important reforms including the PFRDA Act, the recommendations of the OASIS Committee, the IRDA Committee for Pension Reforms and the Expert Group on the New Pension System for strengthening India’s pension sector and tax provisions under NPS.

Pension reforms in India – recommendations for the pension sector

The vision for reforms in the pension sector of India is mainly based on three reports submitted to the Government recently:

1. Project OASIS Committee Report, 2000

1. The OASIS report

The Oasis report was mainly based on the Multi-Pillar System for pension scheme formulations recommended by the World Bank. The system consists of three pillars, two of which are mandatory and one is voluntary. The system defines Pillar-I for social insurance, which will be publically managed and, tax financed. Pillar-II for old-age savings is fully funded and privately managed, and Pillar-III is voluntary for people wanting more protection for their retirement savings.

The first pillar, based on the concept of social Insurance, is akin to public pension plans. It is completely financed by the state and is a safety blanket, especially for the old and poor, whose lifetime income is inadequate for a comfortable retirement, by providing basic security needs. The second pillar is privately managed in a competitive manner and requires mandatory savings for old age by people, and the benefits are actuarially linked to their contributions. The third pillar, which incorporates annuities and voluntary savings, helps in building additional income for old-age.

2. The IRDA Committee

The IRDA report identified some key reasons for reforms in the Indian pension system in the non-government sector:

- The growing burden of civil service pensions
- Measures needed to meet the pension liabilities of state-owned enterprises
- Liberalization of the insurance sector and entry of potential players that can offer pension products
- Recognition of the need for reforms in the functioning of EPFO
These measures were proposed by observing a range of issues such as the Government’s difficulty in funding its pension liabilities as an employer. Employee-managed funds and EPFO are not demonstrating satisfactory results in terms of returns and meeting obligations. However, the proposed liberalization of the sector will help private players offer better pension products to retirees for the contribution they make.

The IRDA Committee’s recommendations take their cue from the OASIS report and prescribe the creation of a system based on privately managed and individual-funded defined-contribution accounts. Lump sum payments and/or annuities on retirement will be actuarially determined, based on funds available. It also recommends privatization of EPFO’s asset management functions, exemption for funds and private insurance companies being allowed to provide annuities. It also advises phasing out of the government subsidy of 1.16% and increasing coverage by covering more organizations and eliminating the present salary ceiling of INR 6,500.

The report also defined a fiduciary relationship of “principle” and “agent” for employers and fund managers, in which fund managers work for a fee with no performance-related guarantee, given that skill and a variety of investment options would be better for participants than publically managed funds. The Government is advised to provide a tax subsidy for private funds to be accepted. The suggested tax measures are increasing entitlement of contributions toward pension for tax rebate of upto INR 80,000 and providing for tax exemption on the income earned by pension funds, “commute” value and annuity amounts received as pension.

For people who have no pension schemes, the report recommends allowing a limited number of private asset managers to operate, each one of them offering investment portfolio options in which participants can choose fund managers, who are selected through a competitive bidding process by regulatory authorities. Other important recommendations of this report include increasing accessibility across the system through India’s postal and banking network, which will also help to minimize administrative costs. Lastly, the report advised the Government to create an independent regulatory authority called the Indian Pensions Authority to regulate the system.

3. The Bhattacharya Report

The report of the High Level Expert Group on the New Pension System of the Government of India elaborated on the requirement for reforms in the Indian pension system for government employees. It made a strong recommendation against the pure defined contribution scheme, which it describes as unsuitable for government employees. Instead, a hybrid defined benefit/defined two-tier contribution scheme was recommended, in which the first tier consists of a mandatory contribution of 10% by the employer and employee, with the accumulated funds being used to pay pensions in the form of an annuity. The second tier is to promote personal savings, and there is no limit for an employee’s contribution, but an employer’s contribution would match it and be limited to 5%.

Accumulated funds can be withdrawn in lump sum or converted into an annuity at the time of retirement. These payments would be tax exempt and portable if an employee changes his or her job before retirement. Another important recommendation is related to funds collected in the first tier, to be deposited in a separate fund, which will be invested in both debt and equity. In this scheme, some funds can be earmarked for active fund management, including for short-term trading for enhanced returns. However, irrespective of a fund’s performance, the Government would continue to be liable for providing pension to its employees, based on a predetermined benefit formula.

Regarding second tier contributions, the Government is advised to have a separate institutional structure, with employees having the choice of funds (income, balanced or growth) to invest in, in which employees will be able to decide to continue, quit or swap funds while in service. Furthermore, the Government will not guarantee any
specific rate of return in this scenario. Lastly, the final important recommendation advocates that new schemes are only applicable for new employees.

The report recommends withdrawal of the existing deduction under Section 80 CCC, since it only defers the tax and annuities received from these funds are taxable. For people with no scheme, the report recommends allowing a limited number of private asset managers to operate, each offering three investment portfolio options, in which participants would have choice among fund managers selected through a competitive bidding process by regulatory authorities. Other important recommendations of this report include increasing accessibility across the system through its postal and banking network throughout the country, which will also help to minimize administrative costs. Lastly, the report advises the Government to create an independent regulatory authority called the Indian Pensions Authority to regulate the system.

PFRDA Act

Countries are moving from a defined benefit pension system to a defined contribution one to meet pension-related commitments. The formation of the National Pension system under the PFRDA Act was a step in this direction. The Act gives a statutory status to the PFRDA and aims to address apprehensions relating to safety and yield under the NPS.

The following are the details of the PFRDA Act, which was passed by the Parliament in September 2013.

It applies to the following pension schemes:

a) The National Pension System
b) Any other pension scheme that is not regulated by any other enactment

Schemes that are not covered under the PFRDA Act:

2. The Employees’ Provident Funds and Miscellaneous Provisions Act, 1952
3. The Seamen’s Provident Fund Act, 1966
4. The Assam Tea Plantations Provident Fund and Pension Fund Scheme Act, 1955
5. The Jammu and Kashmir Employees’ Provident Funds Act, 1961

Features of the National Pension System proposed by the Act:

- An individual pension account under the National Pension system
- Subscribers having the option to choose pension fund managers and investment schemes
- Availability of minimum assured return schemes, based on the risk appetite of the investor
- Option of investment – only in government securities
Successful implementation of NPS is dependent on the following factors:

- Need for pension funds to provide good real returns
- Focus on unorganized sector
- Presence of highly capable pension fund managers on board
- Publicity to create awareness about NPS
- Appropriate incentives provided to all stakeholders to encourage them to provide professional services to subscribers

**Current tax provisions**

The process of saving through a funded pension involves three potentially taxable transactions:

a. When money is contributed to a pension fund
b. When income from investments and capital gains accrue to a fund
c. When members receive benefits on retirement

**Current tax provisions on different schemes:**

<table>
<thead>
<tr>
<th>Scheme</th>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers’ contribution to PF</td>
<td>E1</td>
<td>E2</td>
<td>E3</td>
</tr>
<tr>
<td>Employees’ contribution to PF</td>
<td>E4</td>
<td>E2</td>
<td>E3</td>
</tr>
<tr>
<td>Public Provident Fund</td>
<td>E4</td>
<td>E2</td>
<td>E3</td>
</tr>
<tr>
<td>Employees’ Pension Fund</td>
<td>E</td>
<td>E</td>
<td>T</td>
</tr>
<tr>
<td>Pension plan for insurance companies</td>
<td>E4</td>
<td>E</td>
<td>T</td>
</tr>
</tbody>
</table>

E — Exempted  T — Taxable

1. Tax-free contribution of up to 12% of salary allowed as business expense
2. Interest credited tax exempt
3. Withdrawals only allowed after five years
4. Contribution of INR 100,000 deductible from income under Section 80 C
**Tax benefits under NPS:**

Tax benefits can be accrued on own as well as employer’s contributions, as shown below:

1. **Employee’s own contribution:** eligible for tax deduction of up to 10% of salary (Basic + Dearness Allowance) under Section 80 CCD(1) within the INR 100,000 limit under Sec 80 CCE.

2. **Employer’s contribution:** eligible for tax deduction of up to 10% of salary (Basic + Dearness Allowance) under Section 80 CCC (2), over and above the limit of INR 100,000 provided under Sec 80 CCE.

3. **For self-employed:** exemption of up to 10% of gross income under Sec 80 CCD (1) with an overall ceiling of INR 100,000 under Sec 80 CCE.

- Since the OASIS report of 2000, the reforms have been delayed while the population has been ageing.
- The PFRDA Act 2013 is a watershed event because it signifies the beginning of an era of better governance.
- The performance of a fund is the key for success of a pension plan including NPS to enable members of the plan to achieve adequate corpus.
- Tax incentives for pillar three require a relook e.g., preferential income tax rate on income earned through annuities/retirement plans for people above the age of 60 years.
- NPS may require mandatory subscription or auto enrolment to build the corpus exponentially.
It will be useful for the Indian pension system to refer to pension systems in other countries around the world, especially in developed ones whose pension systems have evolved over several years and are now mature. In this section, we cover the UK's National Employment Savings Trust (NEST) which is similar to the NPS in India. We have also laid out in brief the Netherlands' pension system because of the strong focus on pensions in the country, demonstrated by the high proportion (160%) of pension funds relative to the size of the economy. To conclude, we compare the statistics of pension funds across different countries to share insights about global practices.

**NEST**

NEST is a pension scheme for the workplace in the UK, to promote the interests and rights of workers in the UK. A not-for-profit pension scheme, it is trust-based and is operated by NEST Corporation. It complements the new schemes and Acts designed by the Government in compliance with the UK's Pensions Act of 2008. A defined contribution scheme, in which minimum contributions are fixed, mainly as a percentage of a member's earnings, is how NEST operates, in which the retirement corpus a member receives from a defined contribution scheme is based on the amount the member has contributed, the investment returns and charges over time.

NEST is a customer-friendly scheme, which is easy to use for first-time users, who have never used a pension scheme before. Moreover, if one is already using a particular pension scheme, NEST can still be used alongside the scheme. Furthermore, NEST has a public service obligation, which implies that any employer can use it when its duty commences. Another step taken by NEST to make it more understandable and accessible to users is minimal use of technical jargon and maximum usage of simple vocabulary, which provides clear and transparent information about income, savings, investment, etc. This is also supported by a NEST Phrasebook, which adds to the user-friendly experience in operating this scheme. Another plus point of this scheme is that it is a low-cost one, and members have the opportunity to avail of low charges that are usually derived by people in large occupational schemes today, since members pay a 1.8% charge on contributions plus a 0.3% annual management charge (AMC). Together, the charges are broadly equivalent to a 0.5% AMC.

Lastly, NEST's investment strategy covers three main stages, which are custom designed to meet the needs of members. The growth and consolidation phases help members to effectively mobilize and manage their funds to secure the maximum value through minimal formalities and mental stress. NEST's vision focuses on the long-term social security of its members rather than their short-term gains, which is why although it expects each corpus to grow by more than the cost of living during the consolidation phase of members' funds, its primary focus continues to be on securing their retirement income.

Source: NEST Official Website (www.nestpensions.org.uk)
## Comparison between NEST and NPS

<table>
<thead>
<tr>
<th>Criteria</th>
<th>NPS</th>
<th>NEST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Defined Contribution</td>
<td>Defined Contribution</td>
</tr>
<tr>
<td><strong>Eligibility</strong></td>
<td>Any Indian citizen between 18 and 55 years.</td>
<td>All Workers in UK through Auto-Enrolment. Self-employed can also subscribe to NEST</td>
</tr>
<tr>
<td><strong>Contributions</strong></td>
<td>INR 6000/- minimum needs to be deposited by the subscriber in a year and the minimum contribution is INR 500/- at one time.</td>
<td>Members will contribute 2% of their salary and their employer will contribute an additional 50% of this as a minimum. Annual contribution limit of £4,500.</td>
</tr>
</tbody>
</table>
| **Tax Relief** | a) Employee’s own contribution – Eligible for tax deduction upto 10% of salary (Basic + Dearness Allowance) under Section 80 CCD(1) within the INR 1 lac limit of Sec 80 CCE.  
   b) Employer’s contribution – Eligible for tax deduction upto 10% of salary (Basic + Dearness Allowance) under Section 80 CCC (2) over and above the limit of INR 1 lac provided under Sec 80 CCE.  
   For those who are self-employed the exemption is upto 10% of gross income under Sec 80 CCD (1) with the overall ceiling of INR 1 lac under Sec 80 CCE. | NEST will claim tax relief on the member’s contributions and add it to the member’s pot.  
   (The basic rate of tax relief is 20 percent). |
| **Charges**    | Investment management charge of 0.00010% per annum on net Asset Under Management.  
   Initial charge of opening the account is INR 470.  
   Annual maintenance charge is INR 190, Account opening charge is INR 50, cost per transaction is INR 4. | Annual Management charge (AMC) of 0.3 percent on the total value of a member’s fund each year, calculated on a daily basis. Contribution charge of 1.8 percent is applied on each new contribution. |
| **Benefits**   | Before the attainment of age 60 - upto 20% lump sum withdrawal is permitted to the subscriber.  
   Upon the attainment of age 60 - Upto 60% lump sum withdrawal is permitted to the subscriber.  
   Subscriber can defer the lump sum withdrawal till the age of 70. | Withdrawals permitted upto 25 percent as a tax-free cash lump sum. From age 55 members can transfer out of NEST enabling them to add their NEST pot to other pension pots from other schemes.  
   Option of delaying retirement is also available to the members. |

Source: pfrda.org.in and www.nestpensions.org.uk
Tax relief on pensions in the UK

Tax Relief on Pension contributions offered by the Government has numerous advantages such as reduction in tax and an increase in the personal pension fund, which contributes to savings for retirement. In the UK, the benefit of taxes varies from scheme to scheme, depending on whether one gets an Occupational Scheme (also known as Public Service Scheme or Personal Pension Scheme).

Occupational Pension Schemes operate in a manner so that the employer takes the pension contributions, but not National insurance contributions from employees' salaries, before deducting tax. Therefore, employees only pay the residual amount.

The benefit is that the employee is receiving the full tax benefit straight away, regardless of the rate (basic, higher or additional) at which the tax will be paid. Moreover, employees can still get a tax benefit, even if their employers have not deducted pension contributions from their salaries by claiming benefits through their tax returns.

A personal pension scheme works differently. One pays Income Tax on one's earnings before making any pension contribution. However, the pension provider claims tax back from the Government at the basic rate of 20%. An advantage for pension payers in this scheme is that if a higher rate of tax is paid, they can claim the difference through their respective tax returns.

Another effect of allowances on tax relates to usage of the Age Related Personal Allowance and the Married Couple's Allowance. In such cases, HM's Revenue and Customs subtracts the amount out of pension contributions, plus the basic tax rate from the total income, and then uses the reduced figure to calculate the final value of allowances. A benefit of this procedure will be available to those whose income is above the relevant “income limit” in their respective records, which can lead to an increase in the value of such allowances.

If one does not pay tax, there is still a way of obtaining the advantage of the basic rate tax relief. In such a scenario, one can still pay for a personal pension scheme and benefit from the basic rate of 20% on the first £2,880 a year one puts in. Furthermore, in another situation, if one decides to put money in someone else's pension scheme, the receiver who gets this amount will obtain the relief added to it at the basic rate, but this will not affect the giver's tax bill. Lastly, the true strength of the UK's tax system lies in the fact that consumers can save as much as they like in any number and type of registered pension schemes and get contributions of 100% on their earnings, provided the person has paid the contribution before the age of 75. Furthermore, the amount consumers save each year toward a pension through which they benefit from tax relief is subject to an “annual allowance.” The annual allowance for the tax year 2013-14 is £50,000.

Source: HM Revenue & Customs, UK.
Netherlands’ pension system

The pension system in the Netherlands is a three-pillar one comprising:

1. A state old age pension scheme
2. Occupational pensions
3. Private pension provisions

Pillar one

The first pillar is the state pension (AOW). Algemene Ouderdoms Wet (AOW) is a general old age law, incorporated by the Dutch State Pension for all elderly citizens. It is governed by the general Old Age Pension Act of 1957. The state pension provides a basic income to the elderly, which is linked to the statutory minimum wage. Married couples and those living together each receive 50% of the minimum wage (around € 700 gross per month) and pensioners living alone receive 70% (around € 1,000 gross per month).

Everyone who has lived or worked in the Netherlands between the age of 15 and 65 is eligible for a state pension benefit from the age of 65 onwards. It is a pay-as-you-go system. This means it is partly funded by the workforce in the form of contributions. The remaining part is funded by government public funds. By 2012, the Government had paid € 31.4 billion in pension benefits to 3.14 million people (averaging € 10,000 per person).

Pillar two

This comprises collective pension schemes, administered by a pension fund or an insurance company. Most pension amounts in the Netherlands are managed by pension funds. The company’s funds and pension funds are strictly separated to avoid any conflict of interest. The pension funds are mainly categorized into Industry-wide, corporate pension or pension funds for independent professionals. Pension funds are independent non-profit organizations and are shielded from any financial difficulties a company may face. More than 90% of employees in the Netherlands contribute to a pension fund. Out of these, three-quarters are associated with an industry-wide pension fund. Capital invested by some large funds can be in excess of €150 billion. In March 2013, pension funds in the Netherlands managed an invested capital of around € 960 billion. The Dutch Gross National Product stood at € 607 billion, which translates into assets to GNP ratio of 158%.

Role of tax legislation in pensions

- Tax relief plays an important role in ensuring an adequate standard of living during retirement
- In the Netherlands, the pension-accumulation period is driven by taxation-related measures. No tax is levied on contributions and growth of pension rights through the performance of investments
- Pension benefits are taxed when they are received. This is known as the reversal rule. This deferment in tax payments is beneficial because the tax rates in the future are projected to be lower than those levied on current income
- On an average, the tax rate of a pensioner is around 18%-point lower than that of an employee
OECD countries

Report titled Pensions market in focus, 2013, published by OECD

All institutional investors in OECD countries, including in investment funds, insurance companies, pension funds and other entities, witnessed a growth in their assets in 2012. Institutional investors made investments of US$78.1 trillion the same year. Pension funds grew by an average annual growth rate of 7.4% over 2009-2012.

The following is a snapshot of five-year data relating to assets by type of institutional investors in OECD countries:

<table>
<thead>
<tr>
<th>Type of Institutional Investors</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment funds</td>
<td>22.9</td>
<td>26.8</td>
<td>28.8</td>
<td>28.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>20.2</td>
<td>22.2</td>
<td>23.3</td>
<td>24.2</td>
<td>24.5</td>
</tr>
<tr>
<td>Pension funds</td>
<td>15.4</td>
<td>17.6</td>
<td>19.5</td>
<td>20.4</td>
<td>21.8</td>
</tr>
<tr>
<td>Other (1)</td>
<td>1.3</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>59.8</td>
<td>68.0</td>
<td>73.2</td>
<td>74.4</td>
<td>78.1</td>
</tr>
</tbody>
</table>

Source: Pension Market In Focus, OECD Report 2013

From the table above, it is evident that all three particulars witnessed substantial growth from 2008 to 2012. Investment Funds saw a particularly high growth from 2008 to 2010, whereas pension funds and insurance companies indicated a more gradual trend in rising numbers during these years. Insurance companies witnessed a slight slowdown in growth from 2010 to 2012, with their 2011 and 2012 figures being almost identical.

Importance of pension funds relative to the size of the economies of selected OECD countries (as a percentage of their GDP), 2012:

<table>
<thead>
<tr>
<th>Country</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>160.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>141.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>113.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>95.7</td>
</tr>
<tr>
<td>Australia</td>
<td>91.7</td>
</tr>
<tr>
<td>Finland</td>
<td>79.3</td>
</tr>
<tr>
<td>Weighted average</td>
<td>77.0</td>
</tr>
<tr>
<td>United States</td>
<td>74.5</td>
</tr>
<tr>
<td>Canada</td>
<td>67.3</td>
</tr>
<tr>
<td>Chile</td>
<td>60.0</td>
</tr>
<tr>
<td>Israel</td>
<td>52.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>50.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>49.2</td>
</tr>
<tr>
<td>Simple average</td>
<td>35.5</td>
</tr>
<tr>
<td>Japan</td>
<td>26.3</td>
</tr>
<tr>
<td>Poland</td>
<td>17.2</td>
</tr>
<tr>
<td>New Zealand</td>
<td>16.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>12.3</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>9.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>9.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>8.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>8.7</td>
</tr>
</tbody>
</table>
In the table above, the Netherlands, Iceland and Switzerland have pension funds corpus in excess of their GDP, which indicates the importance of pension funds for their economies. In general, rich countries have ageing populations, and therefore have a sizeable corpus to fund the annuity income required for retirees.

**Geographical distribution of pension fund assets in OECD Countries, 2012 (in percentage):**

<table>
<thead>
<tr>
<th>Country</th>
<th>2001</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>67.6</td>
<td>53.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>9.8</td>
<td>10.7</td>
</tr>
<tr>
<td>Japan</td>
<td>6.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Australia</td>
<td>2.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Canada</td>
<td>3.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Other</td>
<td>3.8</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Source: Pension Fund Market In Focus OECD Report 2013

From the table on the left, it is evident that the US had the maximum pension fund assets among the OECD countries in 2012. It was followed by the UK with around 10% share of pension fund assets.
## Pension fund assets compared with the public pension system’s gross replacement rate*, 2012:

<table>
<thead>
<tr>
<th>Country</th>
<th>Label</th>
<th>Assets %GDP</th>
<th>Gross replacement rate from the public system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>AUS</td>
<td>91.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Austria</td>
<td>AUT</td>
<td>5.3</td>
<td>76.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>BEL</td>
<td>4.6</td>
<td>42.0</td>
</tr>
<tr>
<td>Canada</td>
<td>CAN</td>
<td>67.3</td>
<td>38.9</td>
</tr>
<tr>
<td>Chile</td>
<td>CHL</td>
<td>60.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>CZE</td>
<td>7.1</td>
<td>50.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>DNK</td>
<td>50.1</td>
<td>28.9</td>
</tr>
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<td>EST</td>
<td>8.7</td>
<td>25.5</td>
</tr>
<tr>
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<td>57.8</td>
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<td>49.1</td>
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<td>95.7</td>
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<td>HUN</td>
<td>3.3</td>
<td>44.4</td>
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<tr>
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<td>15.0</td>
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<td>29.0</td>
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<td>ISR</td>
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<td>34.5</td>
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<td>NZL</td>
<td>16.7</td>
<td>38.7</td>
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<td>46.1</td>
</tr>
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<td>28.7</td>
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<td>53.9</td>
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<td>Slovak Republic</td>
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<td>26.0</td>
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<td>SVN</td>
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<td>8.4</td>
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<td>64.5</td>
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<td>GBR</td>
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<td>31.9</td>
</tr>
<tr>
<td>United States</td>
<td>USA</td>
<td>74.5</td>
<td>39.4</td>
</tr>
</tbody>
</table>

Source: Pension Fund Market In Focus, OECD Report 2013

*Gross replacement rate shows the level of pensions in retirement relative to earnings when working
It is evident from the data provided above that the group, including countries such as Australia, the Netherlands, Switzerland, the UK and the US, have large pension fund asset pools that have correspondingly lower public pension replacement rates than the OECD simple average of 42% of individual earnings. However, another interesting trend observed in this scenario in some countries with small asset pools is that some of these have low replacement rates (e.g., Estonia, Mexico and Poland), and some have high rates (e.g., Austria, Greece and Spain). This indicates support provided for pensions by the public system (shown in the table below).

Public and private expenditure on pensions in selected OECD countries, 2012 (as a percentage of their GDP):

<table>
<thead>
<tr>
<th>Country</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>1.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Korea</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Chile</td>
<td>3.6</td>
<td>2.3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>4.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Israel</td>
<td>5.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>6.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Norway</td>
<td>5.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>7.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Iceland</td>
<td>1.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Canada</td>
<td>4.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>7.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>7.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Australia</td>
<td>3.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8.3</td>
<td>0.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>6.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.1</td>
<td>4.3</td>
</tr>
<tr>
<td>OECD</td>
<td>7.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>8.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Spain</td>
<td>9.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Hungary</td>
<td>9.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Finland</td>
<td>9.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>6.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6.3</td>
<td>5.0</td>
</tr>
<tr>
<td>United States</td>
<td>6.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Germany</td>
<td>11.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>10.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Poland</td>
<td>11.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Portugal</td>
<td>12.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Greece</td>
<td>13.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>10.0</td>
<td>3.7</td>
</tr>
<tr>
<td>Austria</td>
<td>13.5</td>
<td>0.2</td>
</tr>
<tr>
<td>France</td>
<td>13.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Italy</td>
<td>15.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Pension Fund Market In Focus, OECD Report 2013

From the data provided above, it is evident that private pension benefits paid are much higher than public expenditure in two countries — Australia and Iceland. In addition, in countries such as the Netherlands, Switzerland, the UK and the US, more than one-third of the benefits paid to current retirees are from private pension arrangements. Public spending on old-age pensions is on the higher side in countries such as France, Germany, Greece, Italy and Poland, and exceeds 10% of their GDP. In stark contrast, in countries such as Australia, Iceland and Mexico, the amount spent on public old-age pension was less than 4% of their GDP.
Private pension-related expenditure on old-age benefits is the highest in Denmark, Iceland and Switzerland — more than 5% of their GDP — in 2012. Expenditure on private pension was low (below 0.3% of their GDP) in 11 OECD countries in 2012. According to the data provided above, it is evident that the US and the UK account for public expenditure of 6.2% and 6.8%, respectively on pension schemes. This is comparatively lower than in some European countries such as Poland, France and Germany, although their percentage of private expenditure is marginally high as compared to most countries. This highlights the high degree of private sector involvement in the US and the UK.

### Total investment of pension funds in OECD and selected non-OECD countries, 2010-2012

<table>
<thead>
<tr>
<th>Pension funds (US$ million)</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total OECD</td>
<td>1,94,73,357.5</td>
<td>2,03,63,080.1</td>
<td>2,17,53,819.9</td>
</tr>
<tr>
<td>China</td>
<td>42,413.4</td>
<td>56,658.6</td>
<td>76,650.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>10,15,665.7</td>
<td>10,55,651.9</td>
<td>12,66,919.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>20,18,040.7</td>
<td>22,32,597.8</td>
<td>23,26,764.2</td>
</tr>
<tr>
<td>United States</td>
<td>1,06,46,829.4</td>
<td>1,08,39,889.2</td>
<td>1,16,13,224.1</td>
</tr>
<tr>
<td>Total selected non-OECD countries</td>
<td>9,64,080.7</td>
<td>9,85,648.1</td>
<td>7,78,093.2</td>
</tr>
<tr>
<td>Total G20 countries</td>
<td>1,73,98,474.9</td>
<td>1,83,13,347.8</td>
<td>1,90,21,813.5</td>
</tr>
<tr>
<td>Euro area</td>
<td>17,81,762.4</td>
<td>18,10,346.4</td>
<td>21,12,565.0</td>
</tr>
<tr>
<td>BRICS</td>
<td>7,25,316.9</td>
<td>7,20,454.8</td>
<td>4,70,626.3</td>
</tr>
<tr>
<td>Latin America</td>
<td>7,04,903.4</td>
<td>6,84,160.8</td>
<td>7,58,805.4</td>
</tr>
<tr>
<td>Asia</td>
<td>18,38,603.5</td>
<td>19,41,540.0</td>
<td>19,39,783.5</td>
</tr>
<tr>
<td>Total world</td>
<td>2,04,37,438.3</td>
<td>2,13,48,728.2</td>
<td>2,25,31,913.0</td>
</tr>
<tr>
<td>Total GDP of the world</td>
<td>7,43,84,980</td>
<td>7,72,11,609.2</td>
<td>7,18,30,000</td>
</tr>
<tr>
<td>World average (percentage)</td>
<td>27%</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td>India’s average (EY estimate)</td>
<td>-</td>
<td>-</td>
<td>11.6%</td>
</tr>
</tbody>
</table>

Source: Pension Fund Market in Focus, OECD Report 2013

- India has a lower pension fund to GDP ratio, compared to global standards
- The auto enrolment concept is prevalent in the UK and the US
- Strong pension-related regulations are in force around the world to provide better governance
- Gross replacement rates vary from 3% to 95% in the world, India has a low GRR due to lack of a robust pillar one pension system
The challenges are broadly described below:

1. **Framework for development of pensions business**
   Perhaps the biggest challenge in designing an efficient and stable pension system in the future will be the role played by the Government, which will need to ensure that appropriate regulations are in place and appropriate incentives are available for all stakeholders. It will also need to facilitate the establishment of a long-term asset market to support the development of pension plans by insurance companies.

2. **Challenges relating to product pricing**
   According to the OASIS report on the discussion about costing, “An increase in the rate of return by one percentage point over a lifetime of accumulations increases the terminal wealth of a pension accumulation program by over 20%.” Following the same principle, reducing expenses and administrative fees, even by 1%, will have the same impact on the wealth created by a pension plan.
   
   Therefore, the main challenge in pricing products will be in securing the lowest possible fees and expenses for the system, and at the same time, enabling the manufacturer of the product to offer guarantees (if any), and earn a reasonable profit and decent sales volume. The report also provides a benchmark rate of “0.25% of pension assets per year,” under which all functions will be possible. This figure will be “one of the lowest levels of cost when compared with individual account systems elsewhere in the world,” it claims.

3. **Role of private players**
   In its proposal, “Report of the High Level Expert Group on New Pensions System,” the IRDA Committee has suggested various recommendations on increasing the liberalization initiative to bring in more private players into the pensions sector. The report advises the Government to create a system that is based on private, individual-funded defined contribution accounts. The IRDA report also brings out the fact that private companies will be able to provide better old age security products to retirees. Pension providers should play a key role in developing pension products that cover longevity and investment guarantee risks as well as identify innovative distribution channels.

4. **Lack of customer awareness**
   According to the OASIS report, “49% of the salaried non-Government employees are covered by a mandatory Employee provident fund and Employee pension scheme.” Such a low number of people with social security truly requires a red flag to be raised on low awareness levels and knowledge about pension schemes among the people. Moreover, since a large number of workers in the rural and un-organized sector are excluded from these schemes, it makes this segment of the population more vulnerable to sinking below the poverty line in their old age.

   The challenge ahead is not only for the urban population, but also for the rural population, who are in greater need of understanding and becoming aware of current pension programs. To achieve this, the Government must strengthen its information-dissemination channels to enable improved and more personalized communication, since “94% Indian respondents say that personal interaction is essential, very or fairly important” while purchasing life and pension products (as validated by the Global Consumer Insurance Survey 2012, conducted by Ernst & Young).
5. High perceived risk in pension products of insurers

The undeniable characteristic of pensions is that they entail risk and present an opportunity for insurers to pool their risk. Defined benefit and contribution plans allocate risks in different ways. Defined contribution plans pass on all risks to members of a plan. In defined benefit plans, the risk rests with the employer or insurance company.

The challenge is to create a hybrid defined benefit/defined contribution scheme to address the needs of customers who are financially sophisticated and believe in ownership and choice, as well as those who are not so financially sophisticated and value assured returns in pension plans. Furthermore, insurers need to have a risk appetite to design pension plans according to the needs of their target market. Insurance companies are in the business of accepting risk – this presents an ideal opportunity to accept risk and price it appropriately.

The associated risks in designing pension products are addressed in the following section:

A. Inflation risk in retirement benefits

Impact of inflation on retirement income

The incomes of people who are employed (formally/ informally) normally rise with the cost of goods and services, although with some lag, but they eventually “catch up” in the long term. Therefore, normal inflation may not be much of a concern. However, for people who are totally dependent on savings, inflation reduces the value of their income and may eat into their savings far more rapidly than they had anticipated, and may lead to insufficient income in old age when it is most required.

During a low inflation period, most people (or their financial planners) make inappropriate allowances for inflation when planning for retirement. The problem arises when there is sustained high inflation in the future, which erodes the value of money. This is what we are witnessing in India today. The current high inflation scenario also means that it is not only important to plan your retirement savings from an early age, but also through products that offer market-linked and inflation-adjusted returns. The following graph depicts the historical variability of inflation in India.

Historical inflation in India

(Source: http://www.inflation.eu) [WPI: Wholesale Price Index; CPI: Consumer Price Index]
Illustration of impact of Inflation on retirement benefits

The following example will help us understand the impact of inflation on retirement needs. For example, let us assume if a person retires with savings of INR 10 million and is expected to live for 20 years. It is assumed that the entire amount is saved in a bank FD.

If long-term inflation is 3% per annum, the retirement fund will be exhausted in the 15th year. Therefore, the amount needed to maintain lifestyle and living standards would have been INR 12.5 million. The table below depicts other scenarios.

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Inflation</th>
<th>Number of years in which original fund will be exhausted</th>
<th>Funds required on retirement to maintain lifestyle and living standards upto 20th year (INR million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0%</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>1%</td>
<td>17.4</td>
<td>10.7</td>
</tr>
<tr>
<td>3</td>
<td>2%</td>
<td>15.6</td>
<td>11.6</td>
</tr>
<tr>
<td>4</td>
<td>3%</td>
<td>14.3</td>
<td>12.5</td>
</tr>
<tr>
<td>5</td>
<td>4%</td>
<td>13.3</td>
<td>13.5</td>
</tr>
<tr>
<td>6</td>
<td>5%</td>
<td>12.4</td>
<td>14.7</td>
</tr>
<tr>
<td>7</td>
<td>6%</td>
<td>11.7</td>
<td>15.9</td>
</tr>
</tbody>
</table>

Service providers including banks, mutual funds, insurance companies and pension schemes, may be providing retirement benefit services either in the accrual phase (before retirement) or drawdown phase (after retirement). They may offer products that are cost-effective due to their specialization, and pooling of risk and costs. One needs to allow for inflation in determining a retirement corpus and also how a retirement corpus should be built. Of course, Instruments offering guaranteed high returns may in the first instance seem lucrative in the pre-retirement and post-retirement phases, but investing in these assets may lead to a shortfall in real income required. Therefore, it may be appropriate, depending on one’s risk appetite, to invest in assets that help hedge against inflation and provide reasonable real return on investment.

Products that benefit providers can design

Product features that can be offered by service providers with respect to inflation hedging include:

- Inflation-linked saving products for building corpus
- Corpus being built in segregated tranches, where one of the tranches may be fully guaranteed, others totally linked to inflation and yet others partially linked to inflation via capping and flooring of indexation

Inflation-linked annuities

1. With or without caps or floors on the amount of inflation indexation on an annuity
2. Annuity being offered in tranches, whereby one of the tranches is fully guaranteed, one totally linked to inflation and others partially linked to inflation via capping and flooring of indexation
3. Benefits being offered in and option mode format, whereby higher benefits are provided with payment of additional fees while retaining the guaranteed nature of the annuity/retirement corpus if the inflation index crosses a certain limit
4. Other than CPI/WPI index, products being linked to a special index, which is linked to a basket of commodities, weighted according to the needs of retirees/elders (including the cost of medicines/special care/nursing)

Asset class for inflation hedging

Service providers can use suitable instruments that enable inflation hedging vis-à-vis provision of high returns. The market for some asset classes/instruments listed below has not developed in India as yet, since there are regulatory restrictions on the maximum holding of an asset class/instrument, depending on the kind of entity. However, we are listing these instruments/asset classes so that a framework can be developed for future use.

Instruments that can be used to hedge inflation:

1. Inflation Indexed Bonds (issued by Government of India)
   Although the inflation-linked (capital indexed) bonds were issued by the RBI in 1997, these only provided protection against inflation risk on the principal amount and not on interest payments. Recently issued Inflation-indexed bonds provide inflation protection on principal and interest payments. However, the current issue is perceived as costly by market participants, mainly due to illiquidity and a fixed tenure of only 10 years, which may not be suitable for pension plans.

2. Equities: Equities are considered a real type of investment. However, high inflation is normally followed by a rise in short-term rates due to the monetary action of regulators, which reduces the return on equities over the short term. However, over a longer period, nominal returns from equities are adjusted with inflation due to the balancing effect of dividends, and real returns are much higher than bonds over the long term. Therefore, using a larger proportion of a diversified portfolio of equity will provide a hedge against inflation and also give better returns.

3. Gold: Gold is considered a good hedge against inflation, but over a period, it has given volatile returns. It is also seen as a “flight to safety” option in times of crisis or extreme volatility, e.g., during the last financial crisis in 2008. However, gold can be used for diversification, either through physical holding or ETF investment.

4. Property: Returns from property are expected to be positively correlated to inflation in the short to medium term. This asset class has not yet developed as a formal investment, but we can see significant development in this asset class in the future.

5. Cash (money market): Cash invested in money market instruments provide a partial hedge against inflation. Cash is useful to pay off short-term liabilities.

6. Inflation-linked swaps: These products are suitable for two counterparties where the liabilities and earnings of one counterparty is opposite to those of another counterparty. For example, one party has a liability, which is index-linked (but with fixed rate earnings), while the other has liabilities that are fixed, but earnings that are inflation-linked. An investment bank may then help the two parties to exchange their cash flows and also reduce counterparty risk by introducing a collateral arrangement, the downside being the margin retained by the bank. This market has not yet developed in India.
7. **Other inflation-linked derivatives:** Although these are not much used, even in developed economies, availability of these instruments (e.g., CPI PUT/CALL) may help investors diversify their portfolios and also hedge a part of inflation risk at a relatively reduced cost.

The suitability of an asset class to match retirement benefits depends on the outlook of inflation and supply/demand dynamics, and thereby, cost, nature of inflation, time horizon, risk preferences and investment regulations.

### B. Managing risks and role of actuaries

Pension and annuity constitute two phases – the accumulation phase and the pay-out phase. The risks and challenges are unique in each of the phases. Historically, the accumulation phase has been much longer than the pay-out phase, and therefore, attention was always focused on the former (occupational pensions and Individual pension).

Occupational pension moved from Defined Benefit (DB) to Defined Contribution (DC). The actuaries, in consultation with individual members and organization, aim to provide the scheme members with appropriate benefits at an acceptable cost. They help to address the following:

- They study how different scheme designs can meet different objectives. They can work out tiered contribution structures, provision of death and ill-health benefits, and provide advice on the effect of future conditions on these benefits. Thereby they can help in assessing the risk.
- To determine the benefit on normal retirement, since this would have implications on the benefits payable in other contingencies.
- They review the continued ability of the scheme to meet targeted benefits in light of changing economic circumstances and age profiles under the scheme.
- They elaborate on possible benefits to members. It is critical from the perspectives of members that their expectations are realistic and they understand the risks in a DC pension plan.
- They provide advice on allocation of assets and methods of minimizing various risks. They can give generic advice to trustees (to be communicated to members), since individual advice can be costly.

The increase in life-expectancy is making it necessary to make changes in customers’ expectations during the payout phase, e.g., flexibility in the pay-out phase to allow for facilities such as liquidity, variation in asset allocation post retirement or changes in pay out, based on the changing economic environment.

In order to cater to the annuitants’ requirement mentioned above, there have been innovations in the product offering worldwide in the pay-out phase over the last decade. Variable Annuity (VA) has gained importance over the years. Variable annuities offer various guarantees including guaranteed minimum income benefit, guaranteed death benefit and guaranteed minimum withdrawal benefit. However, the risks of offering these products were felt during the recent economic turmoil when:

- Inflation is a key risk for plan members as well as for manufacturers of products
- Inflation risk is compounded due to the long-term nature of pension plans
- As per EY estimates, the fund required on retirement may need to be increased by nearly 10% if expected inflation increases by 1% per annum
- Inflation linked annuities backed by inflation linked bonds may help with inflation hedging
Stock market volatility increased considerably
The risk free interest rate reached an all-time low, with short rates on treasury bills occasionally drifting into negative territory
Financial liquidity evaporated for many products – the bid-ask spread on long-term options increased markedly and trading volumes were significantly reduced

These conditions exposed the industry to several painful realities. This brought the issue of managing the risks of guarantees to the forefront.

Therefore, managing risks of guarantees are often driven by product design, regulatory constraints and the risk appetite of a company, either in the accumulation phase or the pay-out phase. It is important to balance the expectation of higher required return while ensuring the security/solvency of a fund/company.

Risks associated with pension and annuity contracts:

Market risk
A key feature of the product design is its inherent exposure to market risk.

Market risk can be decomposed into so-called systematic market risk and non-systematic risk or basis risk. Basis risk relates to the extent to which the underlying managed funds do not perfectly track market indices, while systematic covers the risk of indices and other market variables that are moving adversely.

Credit risk
Implementation of a hedging program would involve employment of a range of derivative and structured instruments. This would introduce exposure to a range of counterparties that will need to be managed. This is in addition to the credit risk component of exposure to “defaultable” bonds in underlying product investments.

Longevity/ mortality risk
The various types of pension and annuity products that can be offered generally include some element of mortality or longevity risk exposure. Exposure to mortality risk would typically be relatively straightforward to manage, although this is somewhat complicated by the fact that the level of exposure varies with market levels. A significant fall in market levels could lead to a material increase in exposure to mortality. There is also the risk of selective lapse behavior in such circumstances, with less healthy customers retaining their contracts to benefit from increasingly valuable life benefits.

Longevity risk is relevant for annuity plans, but this is an area of uncertainty for India because of its limited experience in mortality-related improvements.

A variety of reinsurance strategies may be available to mitigate these risks, and triggers and thresholds should be put in place to prompt a review of the risk management strategy.

Interest rate risk
Pension and annuity contracts are priced assuming a certain rate of interest. There is a risk that the actual rate may be different from the assumed one. This risk can be minimized by resetting annuity contract periods or guaranteeing annuity rates for a limited period. Risk can also be reduced by using interest rate futures.
Asset-allocation risk
Unit-linked pension and annuity contracts allow customers to make their selection from a range of different funds, which may have diverse asset allocation mixes. Pricing is based on assumed average allocation. There is a risk to a company if its actual mixes of selected funds differ from the assumptions. The risk can be reduced by limiting the range of funds and or introducing the policy clauses, which allow a company to change the asset mix if volatility increases.

This is limited in conventional annuity contracts as this is specified in the investment mandate and is approved by the board.

Operational risk
These risks include model and pricing risk. This becomes more significant when the hedging program is put in place by a company. This is likely to introduce a range of complex exposures to market risk and interaction between market and behavior risk that does not exist in other products.

Pricing risk
The long-term profitability of a product will depend on a wide range of assumptions within pricing models. In practice, experience will differ from these assumptions and profitability may turn out to be less than expected. The complexity of a product increases the risk of model errors or of results being more sensitive to pricing assumptions than expected.

- Actuaries play a key role in design, pricing, reserving, ALM and risk management of pension plans
- Scheme actuaries can play a vital role in advising employees and trustees on occupational retirement plans
- The pension business is a big opportunity for insurance companies to pool mortality and longevity risks. For example, term insurance plans have mortality risks and annuity plans have longevity risks, the insurer can pool these while aggregating their risks as part of their enterprise risks management process
C. Pension distribution under pillar three

In India, there are broadly two main avenues through which pension products are distributed:

- Life insurance players
- The National Pensions System (NPS)

Life insurance players

Pension products received a strong thrust from the life insurance industry in the initial years after the opening up of the sector to private players. The insurance sector, including pensions, in India, as in most other parts of the world, continues to be driven by distributors’ push rather than a strong customer pull. There were several factors that contributed to the success and strong uptake of pension products by distributors in the life insurance space. Some of these factors included:

- Innovatively designed zero death benefit (ZDB) products with problem-free over-the-counter (OTC) issuance
- Ability of customer to liquidate accumulated corpus at any given point in time
- Attractive new business commissions

The combination of the factors mentioned earlier resulted in ease of sale for distributors historically struggling to successfully push an intangible and complex financial product in the market.

Consequently, pension products ended up being one of the strong growth drivers of the Indian life insurance industry prior to the regulatory changes effected in September 2010.

Circa September 2010, the IRDA implemented a slew of regulatory changes that focused on Unit Linked Insurance Products (ULIPs).

This included the pension products that were on offer by life insurers at the time.

Some of these specific regulations included:

- IRDA mandated insurers to offer a minimum guaranteed return of 4.5% p.a. on unit-linked pension plans
- The regulator disallowed partial withdrawals in such pension products during the accumulation phase
- Annuityization on maturity and surrender were made mandatory

This ended up being a non-starter for the industry since insurers were concerned about long-term investment guarantee and the cap on charges limited the incentive payable to distributors. Almost all life insurers, with the exception of one, were forced to exit the pension’s space in the immediate months after September 2010, and as a result, the industry saw a massive drop in new business premiums.

However, after several discussions with life insurance players, IRDA changed its guidelines on pension products.

The regulator amended the guidelines on unit-linked pension plans, whereby insurers now had to guarantee an assured benefit (non-zero return) in the form of a rate of return that would have to be disclosed upfront.

While some insurers have slowly begun re-entering the market with new and compliant pension products, distribution challenges have not yet been addressed. Some of these include:
Compulsory annuitization of pension plans

Annuity income being treated as taxable income

Level of benefits lower than customers’ expectations

National Pension System (NPS)

The NPS is an effort to find sustainable solutions to the problem of providing adequate retirement income. As a first step toward instituting pension reforms, the Government of India moved from a defined benefit pension to a defined contribution-based National Pension System by making it mandatory for its new recruits (except the armed forces) with effect from 1 January 2004. Furthermore, NPS was made available to every citizen of India from May 2009 on a voluntary basis.

Some distribution-related challenges pertaining to NPS:

- Lack of customer perception or preparation for old age financial security and expectation of familial support
- Poor financial literacy levels
- Gold and physical assets continuing to be perceived as “safer” investment avenues
- Lack of financial exposure of target population to even mundane transactions such as opening bank accounts and ATM cash withdrawal
- High inflation rates affecting customers’ ability to save for the future by sacrificing present consumption
- Fee cap of 0.25% (private sector) on pension fund managers (PFM)

Pension coverage and distribution

The pensions industry, like any other financial services industry such as banks and insurance, would do well to factor in the distributor mind set to ensure sustained uptake as well as maximum coverage of pension products in the long term. This would mean getting the best possible distributor proposition.

Many life insurance players are slowly but surely moving toward developing truly multi-channel architectures that would require individual agents, bancassurance partners, broking tie-ups, direct sales and other innovative distribution models. For instance, pension funds could structurally bundle life insurance and pension plans.

It is also a known fact that postal savings schemes end up being a significant accumulator of savings in India, especially in rural areas with limited access to banking services. This is possibly another distribution avenue that can be tapped to enhance and expand the pensions market.

Similarly, another example of insurers leveraging existing distribution setups can be found in insurance corporate sales teams providing retail customer leads from their corporate relationships, to enable sale of retail pensions and NPS.
D. Customer awareness

Customer awareness is a fundamental indicator that will help in determining the growth of India’s pension sector. Marketing and distribution strategies also need to be formulated by pension providers. This section details existing levels of customer awareness in urban and rural areas and makes a sincere effort to be informative and prescriptive.

“The challenge in building a pension system also lies in obtaining low administrative costs, nation-wide collection, and adequate simplicity for participation by millions of people with highly limited financial sophistication.” (The Project OASIS Report, 2000)

“For the effective implementation of the pension reforms, the following measures are to be taken: Advocacy and education about the pension requirements among the common people and policy makers.” (P. Bhattacharya, ICFAI)

The most important factor that policy-makers and regulatory bodies need to understand is the active and dormant needs of the customer. India’s pension sector needs to communicate with the people in the most effective and transparent manner. More than mere “market research,” understanding consumers’ mind-sets and their critical needs is the need of the hour for pension providers.

EY conducted a Global Consumer Survey in 2012 by interviewing 1,000 consumers of life and non-life personal insurance products. In this section, we will discuss some of the key results of the survey.

**Adequate communication with customer is essential**

![Pie chart showing 94% Yes and 6% No]

Source: EY Consumer Insurance Survey, 2012

The survey results indicated a low level of personal interaction by product providers with consumers, although most consumers (94%) believe that adequate interaction and interpersonal discussion are an essential part of the decision-making process.

Moreover, consumers believe that the most important factors they take into consideration are products’ features (58%), their performance (38%) and a provider’s brand (37%). Therefore, it is important to establish a strong connection and communication link with customers and explain all the features of a product in detail. Another factor that supports the need to improve communication with buyers is their willingness to pay for advice – 74% are willing to pay for advice from intermediaries, firms, brokers, etc.
According to the survey results, 93% of customers are confident that the market has the right products for them. However, despite their level of willingness and interest, they think sellers do not put in much of effort to sell their products effectively. Almost 50% of consumers rate the service quality levels below their expectations of the Insurance sector as a whole. This perception is worse in lower income groups, where 55% feel that service quality is low and sub-standard. This stresses the importance of customer servicing and that product providers should be able to deliver on promises made at point of sales and during marketing campaigns.

**Life and pension products: 74% of customers actively researching these before buying**

![Graph: 74% of customers actively researching life and pension products](image)

Source: EY Consumer Insurance Survey, 2012

While the demand of insurance products is driven by two main factors – 54% buy for family needs and 39% for retirement – there is a strong desire for brand loyalty and reward programs, which is not being met by pension providers. Around 37% of consumers believe that the industry is behind other sectors in rewarding loyal customers. Friends and family play an important role in the buying process, since 36% of the consumers actively involve their friends and families in discussions before taking a final decision.

**36% of customers actively involving their friends and families before taking decision**

![Graph: 36% of customers actively involving friends and families](image)

Source: EY Consumer Insurance Survey, 2012

Around 20% of customers feel that insurers are not meeting their needs, and 52% believe that the reason for this is that providers focus on selling more products, rather than understanding what is required by the customer. According to the survey, personal contact and frequent communication with a provider is an important factor in earning a customer’s loyalty.
On a concluding note (based on the findings of the survey), customer awareness and education levels need to be improved. Customers are willing to learn about plans that meet their needs. They expect to be advised on the right product, are willing to pay for the right service, but after-sales service must deliver the brand promise. Policy-makers and regulatory bodies need to leverage consumers' interest and offer them products that offer long-term value, with in a stable and structured system.

**Simple and transparent communication**

In the insurance and pensions sectors, customers want products and the purchasing process to be simple and transparent so that they can understand what they are buying. They want to build long-term relationships, based on trust, with insurance providers, and to have confidence that the products they are buying are right for them and meet their needs. This requires reduced paperwork and transparency in policy wording.

- 74% of customers actively research before buying life and pension products
- 39% of customers buy life products for retirement planning
- 50% of customers rate service quality levels below their expectations of the insurance sector as a whole
We have evaluated the current state of the pension business in India, considered the importance of pension products and citizens’ need for them. In addition, we have also discussed the current regulatory framework, along with key issues and challenges faced by the industry, in previous sections. In this section, we elaborate on the possible initiatives that need to be taken by different stakeholders to address the gaps and tap opportunities for the pension sector.

The broad level issues faced by the industry are:

- Large population uncovered by pensions system
- Lack of public awareness about the need for pensions
- Availability of right products
- Appropriate incentives for all stakeholders

Possible solutions for these issues are discussed below:

### Large population uncovered by pensions system

The key initiatives that may be considered to enhance coverage of pension plans are:

- Auto enrolment into pension schemes e.g. NEST scheme in the UK
- Mandatory enrolment into pension schemes e.g. raising the salary ceiling for EPFO subscription
- Use prevailing distribution networks like India Post, Co-operative banks, NGOs, Self-help Groups, Micro-finance Institutions
- Open up the existing schemes for wider participation e.g., access to EPFO for the people working in the informal sector, allowing higher contributions in PPF

### Public awareness about the need for pensions

This is key concern area that needs to be addressed urgently. Some of the possible desirable actions are:

- National level education campaigns by the government, regulators. The campaign should cover the need for pensions, inadequacy of current pension provisions under pillar two and the avenues available to save for pensions
- In depth market research to understand the customer aspirations and identify the needs of the specific segments e.g. rural and urban, working age groups and people past retirement age
- Individual pension advisors who are well trained and certified for providing pensions advice to customers
Availability of right products

The pension providers have the responsibility to design appropriate products. The possible actions may include:

- Enhance attractiveness of annuity plans through appropriate pricing and innovative solutions e.g. impaired life annuities
- Pension fund managers should aim to achieve adequate returns to enable customers to achieve the desired fund corpus on retirement
- Offer guarantees and price them adequately e.g. assured return scheme under PFRDA Act
- Pension Scheme actuaries to advise trustees and sponsors of occupational pension schemes. Insurance companies actuaries to design and manage pension plans as per principles of “public interest” allowing for appropriate profit margins and ensuring regulatory compliance
- Global mobility of human capital means that cross border movement of retirement funds could potentially be a big opportunity. This would require initiatives at government, regulatory and product manufacturer / plan sponsor’s level to seek approval of overseas pensions regulatory bodies to agree upon mutual recognition of the pension schemes

Appropriate incentives for all stakeholders

All stakeholders need incentives to play their role in development of the pensions sector. The customers need tax breaks, the providers aim at reasonable profits and the regulator expects that customers are treated fairly along with smooth development of the sector as well as 100% compliance with regulations.

- Tax rate of a pensioner in Netherlands is 18% lower than the tax rate of an employee. In India we could have preferential tax rate for income earned from retirement funds and for retirees
- The permission of 26% FDI in pension funds, as per PFRDA Act, is a good indicator of government’s focus on enhancing the development of pensions industry. The foreign partners would bring the appropriate practices on funds management based on their experience in both emerging and developed markets. This should be encouraged further by enhancing the FDI.
- The pension product structure needs to allow for appropriate income for all stakeholders e.g. incentive for the distributor to advise customers
- The pension providers expect reasonable profits to be able to provide good quality service to customers. The regulatory framework should help in striking a balance between the profitability of pension providers and value delivered to the customer.
- The regulations around occupational pension plans would help improve governance of employer sponsored retirement plans and also help employees achieve the desired income replacement ratio after retirement.
- The Government may provide appropriate financial support for economically deprived sections of the society example, paying a contribution equal to the contribution by the member of the plan, providing capital guarantee.
While the Indian pensions industry offers significant potential for growth, players have struggled in the recent years owing to concerns about uncertainty about product risks, uncertainty on regulations and lack of customer awareness about the need for pension’s provision. It is vital that growth and profitability are balanced and supported by right products which cater to customers post-retirement needs.

A concerted effort from the stakeholders will create an environment for the development of the industry. This has to be based on customer awareness campaigns, professional need assessment, product development, use of the right distribution channels and servicing the customers over the term of the pension plans.

► Appropriate incentives for all stakeholders
► Right product design and actuarial skills for risk management
► Coordination amongst regulators at the national as well as global level
► Focus on transparency and governance to boost customer confidence
► Mandatory enrolment into pension schemes e.g., raising the salary ceiling for EPFO subscriptions
Abbreviations

AMC: Annual Management Charge
AOW: Algemene Ouderdoms Wet
ATM: Automated Teller Machine
BSE: Bombay Stock Exchange
CPI: Consumer Price Index
DB: Defined Benefit
DC: Defined Contribution
EPFO: Employees’ Provident Fund Organization
FDI: Foreign Direct Investment
GOI: Government of India
GRC: Governance, Risk Management, and Compliance
GRR: Gross Replacement Rate
ICFAI: Institute of Chartered Financial Analysts of India
IRDA: Insurance Regulatory & Development Authority
NCEUS: National Commission for Enterprises in the Unorganized Sector
NEST: National Employment Savings Trust
NPS: National Pension System
NRI: Non-Residential Indian
NSSO: National Sample Survey Organisation
OASIS: Old Age Social and Income Security
OECD: Organisation for Economic Co-operation and Development
OTC: Over the Counter
PAYG: Pay As You Go
PFM: Pension Fund Managers
PFRDA: Pension Fund Regulatory and Development Authority
PPF: Public Provident Fund
PSU: Public Sector Undertaking
RBI: Reserve Bank of India
ULIP: Unit Linked Investment Products
UN: United Nations
UNDESA: United Nations Department of Economic and Social Affairs
UNFPA: United Nations Population Fund
WB: World Bank
WPI: Wholesale Price Index
ZDB: Zero Death Benefits
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People to contact

Rohan Sachdev
Partner & National Leader - Insurance
Ernst & Young LLP
Mobile: +91 99207 76259
Email: rohan.sachdev@in.ey.com

Gautam Kakar
Director – Actuarial Practice
Ernst & Young LLP
Mobile: +91 98338 07922
Email: gautam.kakar@in.ey.com

Special thanks to the following for their contribution towards this report:

Gautam Kakar
Director – Actuarial Practice

Jigar Shah
Consultant – Advisory Services

Suryansh Nigam
Associate Consultant – Advisory Services
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<td>Ahmedabad</td>
<td>2nd floor, Shivalik Ishaan Near C.N. Vidhyalaya Ambawadi Ahmedabad - 380 015</td>
<td></td>
<td>Tel: + 91 79 6608 3800 Fax: + 91 79 6608 3900</td>
</tr>
<tr>
<td>Bengaluru</td>
<td>12th &amp; 13th floor UB City, Canberra Block No.24 Vittal Mallya Road Bengaluru - 560 001</td>
<td></td>
<td>Tel: + 91 80 4027 5000 + 91 80 6727 5000 Fax: + 91 80 2210 6000 (12th floor) Fax: + 91 80 2224 0695 (13th floor)</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>1st Floor, SCO: 166-167 Sector 9-C, Madhya Marg Chandigarh - 160 009</td>
<td></td>
<td>Tel: + 91 172 671 7800 Fax: + 91 172 671 7888</td>
</tr>
<tr>
<td>Chennai</td>
<td>Tidel Park, 6th &amp; 7th Floor A Block (Module 601,701-702) No.4, Rajiv Gandhi Salai, Taramani Chennai - 600113</td>
<td></td>
<td>Tel: + 91 44 6654 8100 Fax: + 91 44 2254 0120</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>Oval Office, 18, iLabs Centre Hitech City, Madhapur Hyderabad - 500081</td>
<td></td>
<td>Tel: + 91 40 6736 2000 Fax: + 91 40 6736 2200</td>
</tr>
<tr>
<td>Kochi</td>
<td>9th Floor, ABAD Nucleus NH-49, Maradu PO Kochi - 682304</td>
<td></td>
<td>Tel: + 91 484 304 4000 Fax: + 91 484 270 5393</td>
</tr>
<tr>
<td>Kolkata</td>
<td>22 Camac Street 3rd floor, Block C Kolkata - 700 016</td>
<td></td>
<td>Tel: + 91 33 6615 3400 Fax: + 91 33 2281 7750</td>
</tr>
<tr>
<td>Mumbai</td>
<td>14th Floor, The Ruby 29 Senapati Bapat Marg Dadar (W), Mumbai - 400028</td>
<td></td>
<td>Tel: + 91 22 6192 0000 Fax: + 91 22 6192 1000</td>
</tr>
<tr>
<td></td>
<td>5th Floor, Block B-2 Nirlon Knowledge Park Off Western Express Highway Goregaon (E) Mumbai - 400 063</td>
<td></td>
<td>Tel: + 91 22 6192 0000 Fax: + 91 22 6192 3000</td>
</tr>
<tr>
<td>NCR</td>
<td>Golf View Corporate Tower B Near DLF Golf Course Sector 42 Gurgaon - 122002</td>
<td></td>
<td>Tel: + 91 124 464 4000 Fax: + 91 124 464 4050</td>
</tr>
<tr>
<td></td>
<td>6th floor, HT House 18-20 Kasturba Gandhi Marg New Delhi - 110 001</td>
<td></td>
<td>Tel: + 91 11 4363 3000 Fax: + 91 11 4363 3200</td>
</tr>
<tr>
<td>Pune</td>
<td>C-401, 4th floor Panchshil Tech Park Yerwada (Near Don Bosco School) Pune - 411 006</td>
<td></td>
<td>Tel: + 91 20 6603 6000 Fax: + 91 20 6601 5900</td>
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ED 0114

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