DeRisk

CRISIL's insights and analyses of regulations, macroeconomic factors, guidance and trends affecting the insurance industry

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Diminishing returns

The Covid-19 pandemic adds another painful twist. Pensioners may have to make do with less and less in future, even as workers are forced to contribute more and more

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Pension funds, the refuge of millions in their sunset years, are staring at new risks, with the Novel Coronavirus (Covid-19) pandemic compounding the problem of dilution of robust pension systems by governments because of low interest rates and global slowdown – amid worker protests.

The risks will test the design and coverage of pension funds in terms of ability to continue providing diverse benefits. The large sell-offs in markets will reduce investments and funding for pensions worldwide. That will also stoke the need for supplemental pension products.

Insurers are vulnerable, too. Not only because of an increase in claims due to deceased insureds or annuitants, but also inclement investment conditions toppling financial support for investment products.

Indeed, the painstakingly built drive towards demanding income security in old age, mounted by working classes across jurisdictions over the years, is also now in peril. In calendar 2019, the unionised Yellow Vests took to the streets of France to protest against changes in retirement age. The world beheld the young and elderly population protests in Chile transform their demands from train ticket price-hike complaints to constitutional demands in favour of reforms to the financial system, including pensions.

Such efforts are increasingly at risk, and a secure retirement is turning a pipedream. Covid-19 has felled the economy, the health, and financial security of working-age groups – all at one stroke.

What's the plan?

At the time of the 2008 financial crisis, many countries had defined-benefit (DB)[1] pension plans, and their funding and solvency ratio were dramatically affected by it. The adoption of defined-contribution (DC)[2] plans increased significantly. The fact that these plans are affected differently depending on their investment profile holds in the prevailing situation too – the impact of a low interest rate regime and economic downturn on pension funds will depend on the type of plan, whether it is DB, DC, or hybrid scheme.

In 2020, the potential economic impact of Covid-19 will likely be the final bullet that kills all remaining DB plans, this is because the difficulty to finance an guarantee them in the prevailing economic environment. This will reduce even more the retirement options for many retirees.

So it is more important now than ever, that governments, corporations, and individuals continue to prioritise the pension reforms agenda to immunise the programmes in force and ensure sustainability of systems. While the long-term effects of Covid-19 are still unknown, we try to anticipate here some of the short-term impacts, and thereby, gain an understanding of how to mitigate them.

Global trends in pension regulations

Pension systems and their reforms are in a constant state of flux, driven by shifting objectives, reform needs, and a changing regulatory environment.

Governments across the world are reforming their pension systems to ensure that the growing share of workers in temporary or part-time employment can contribute enough during their working lives to receive an adequate income in retirement.

These include the Institutions for Occupational Retirement Provision (IORP) directive implementation in Europe (IORP II is the key European regulation for workplace pension funds, replacing the 2003 IORP directive), the focus on environment, social and governance (ESG) reforms in Asia, and the Retirement Enhancement and Savings Act (RESA) Bill in the United States (US), which might get reintroduced.

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[1]Is called 'defined benefit' because employees and employers know the formula for calculating retirement benefits ahead of time, and they use it to define and set the benefit paid out. This fund is different from other retirement funds, like retirement savings accounts, where the payout amounts depend on investment returns. Poor investment returns or faulty assumptions and calculations can result in a funding shortfall, where employers are legally obligated to make up the difference with a cash contribution (Source: Investopedia).
[2]This is a retirement plan that's typically tax deferred, in which employees contribute a fixed amount or a percentage of their paychecks to an account that is intended to fund their retirements. The sponsor company will, at times match a portion of employee contributions as an added benefit. These plans place restrictions that control when and how each employee can withdraw from these accounts without penalties (Source: Investopedia).

More than 170 countries[3] around the world provide some kind of pension benefits to their citizens, but the design and coverage vary significantly. These could be classified as:

- Universal age – eligibility is based solely on the age of the individual and the history of citizenship
- Means tested – eligibility is based on the income generated by an individual
- Universal minimum – individuals over a certain specified age will receive a pension[4]

But state-owned pension funds have been rocked by scandals and widespread public protests in many countries. In troubled economies with longer life expectancies, many have been forced to work past the age limit due to insufficient savings. Unpopular measures and reforms by governments in this regard has sparked widespread protests by unions and other working age groups. A recessionary and low growth/low interest environment will continue to reduce the funding level of DB plans and portfolios for DC schemes. A closer look at how each region is faring:

Europe

IORP II came into force on January 13, 2019. Its main goal was to facilitate the development of occupational retirement savings and provide sustainable and adequate occupational pensions to European citizens. It added 43 new articles to the original IORP directive and put a renewed focus on governance, communication standards, and risk management functions. These are aimed at providing guiding principles to countries looking to keep up with good regulatory practices around pension funds.

Given that pension funds across Europe manage assets valued at £2.5 trillion ($3.5 trillion) for 75 million beneficiaries, IORP II mandates strong governance, sound risk assessment, and improved transparency to better protect the interests of European members. It envisages a minimum harmonisation approach aimed at improving: governance and transparency, investor communication, investment strategy, risk management, safe keeping, and cross borders transfers.

However, a one-size-fits-all approach to compliance may not be feasible, and individual firms must define their implementation road maps based on internal policies and business strategies. Compliance with IORP II is also challenging, given the enhanced governance requirements, especially the ‘own risk assessment’ component.

After the United Kingdom (UK) left the European Union (EU) on January 31, 2020, it faces different challenges including retirement income security. For example, the newest collective DC pension reform aims to address the needs of unions with a scheme that combines the power of a large pool of employees organised in unions. However, the expectation after Brexit is that an ideal post-EU regulatory framework[5] should be in place, according to the views of the Prudential Regulatory Authority in UK in early-March 2020.

Asia

Significant developments are in the making. The ageing issue will become a major challenge over the next few decades. Covid-19 has largely affected China, Singapore, and South Korea because of the retirement age population concentration. By 2050, Asia will account for about half of the global population above 60 years old. This rapid population ageing suggests a need to allocate greater economic resources for the elderly. Asia’s growing labour mobility and huge informal employment also call for improvement in pension management and coverage. The Organisation for Economic Co-operation and Development (OECD) has cited (i) the relatively low coverage for formal pension system and (ii) the common practice of withdrawal of pension savings,[6] as reasons why current Asian and Pacific pension systems need reforms.

Americas

Here, regulatory changes have not had similar drivers. The US private retirement plan is

[3] *ILO - World Social Protection Report 2017-19*
[4] *Pension Watch - http://www.pension-watch.net/social-pensions-database/social-pensions-around-the-world/*
[5] *https://www.bankofengland.co.uk/-/media/boe/files/speech/2020/the-ideal-post-eu-regulatory-framework-speech-by-victoria-saporta.pdf?la=en&hash=2BBC9A3AD75F8C6DDB2FE04273A7220F3011A66D*
[6] *https://www.adb.org/sites/default/files/publication/28554/reg-reforming-pension-systems.pdf*

accessible to a low number of workers. The multiemployer pension plan is under crisis. As many as 117 such plans covering 1.4 million participants are underfunded by $5.6 million and could become insolvent within the next 20 years[7]. The Latin American pension landscape is diverse. Contributory pension schemes have been at the core, but non-contributory schemes have mushroomed in parallel in recent years. The government had expanded pension promises without expanding contributions, thus widening the deficit.

What the Covid-19 crisis means for the industry

As the pandemic spreads, regulators and international organisations plan to delay disclosure deadlines. For instance, the European Central Bank (ECB) has been quick to call off its stress testing, given is not efficient to spend time and resources in a simulation when there is an actual crisis event going on. This could ease the busy agenda of banks.

Other national competent authorities are following suit. For example, the European Insurance and Occupational Pensions Authority has extended its holistic impact assessment for the 2020 Solvency II Review[8] by two months to June 1, 2020 for insurers. The Accounting Standards Board has postponed the IFRS 17 implementation to January 1, 2023, so far the longest implementation time for an accounting standard.

For the insurance industry, implications may be on:

1. **Operations.** Continuing services to clients particularly payment distribution and claim management may turn difficult especially for those lagging in the digital learning curve

2. **Claims.** Business interruption claims would increase, as well as insured amounts for policyholders and beneficiaries. Worker compensation claims may be impacted if Covid-19 qualifies for occupational illness

3. **Capital position.** Insurers have sufficient solvency capital requirements to absorb immediate effect of Covid-19 stress. However, they should be prudent in dividend distribution and capital use, as the long term effects of this pandemic are unknown

Implications for the pension industry:

4. **Cash flow shortage.** Economic activities are affected, resulting in less revenue for state and businesses to pay benefits to retirees or sponsor contributions in retirement savings accounts

5. **Benefits at risk.** In some countries, the retirement benefits are insured or protected in the event of extreme economic downturn by a specialised insurance corporation, typically state owned. However, in case of DC plans, the financial downturn will directly hit savers and retirement-age workers

6. **Wider funding deficit.** Funded pension plans will be directly impacted due to the financial downturn and hit to equity investments. To overcome the downturn, many states/banks will lower short-term interest rates. That will result in an increase in the gap between the assets and pension plans liabilities, increasing the need for more money to meet the future obligations with the employees.

Other implications for insurance and pension industry:

1. **Digitisation acceleration.** With social isolation and mobility restriction, a more robust digital solution will be needed to continue serving clients, particularly policyholders and retirees

2. **Reporting relief.** Each national authority may evaluate how to provide relief with respect to timing of statutory reporting or disclosure. They may also provide fiscal and funding packages

3. **Asset allocation.** It might eencourage or require higher levels of private saving, both within and beyond the pension

[7] *https://www.ai-cio.com/news/100-multiemployer-pension-plans-may-fail-within-20-years/*
[8] *https://www.eiopa.europa.eu/content/eiopa-statement-actions-mitigate-impact-coronaviruscovid-19-eu-insurance-sector_en?source=search*

system, to reduce future dependence on public pension while also adjusting the pension amount expectations of many workers

4. **Forex.** Currency exchange volatility may create additional swings to the economy

Dealing with underperforming investments

The Covid-19 pandemic has rattled investors of all kinds and pension funds are no exception. It has resulted in a roller coaster ride for asset managers who oversee DB funds assets. Long-term bond yields have plunged and funding ratios are set to suffer. The effect is expected to extend to insurers, too.

For example, the median expected return in the US was 7.25% in 2019 across the largest public pension plans based on their diversified asset mix. This was much lower than that in 2001, when most public plans had expected returns greater than 8%. The number of plans with expected returns below 7% has gone up from 0 to 16 over 2001–2019[9].

In the first half of March 2020 alone, the market plunged between 20-40% in many of the stock exchange indices worldwide. Monetary policy, fiscal incentives, and other measures are expected to come soon. A growing number of public pension plans are recognising the impact of a low-rate and low-return environment and reducing their expected returns assumptions. Weaker trade growth and investment, high levels of uncertainty over Brexit, and trade tensions between China and the US are starting to spill over into other economies. We believe:

Future benefits may be lower: Since low interest rates anticipate future economic conditions characterised by low growth, low inflation and low returns on investment, future pension benefits may also be lower. The situation is similar for pension funds that offer benefits linked to salaries or inflation. Low interest rates combined with lower inflation would also reduce wages and thus future benefits to be paid.

Valuation method matters: The measurement of low interest rates also depends on the valuation method used to calculate DB funding ratios. The liabilities of a DB scheme are equal to the discounted value of the promised cash flows benefits. If the discount rate is based on long-term interest rates, a long low-interest-rate environment implies a higher ongoing level of liabilities leading to an increase in funding deficiency.

DC schemes will suffer: For DC schemes, current contribution levels are likely to produce disappointing and inadequate results, all else equal. Similarly, the costs of DB guarantees will increase. This weakens long-term solvency and exacerbates challenges of underfunding[10] . DC plan assets will also be directly affected by an extended period of low interest rates depending upon the fund's investment strategy and the extent to which the equity part of the portfolio suffers from a low interest rate environment. Over the long term, lower investment returns will translate into lower benefits, unless employees and employers contribute more to these plans in order to attain the same level of retirement benefits that would have been achieved in a 'normal' interest rate environment.

Potential impact on retirement age group

Before the Covid-19 shock, low interest rates were already forcing the world's best pension system to take drastic action aimed at staving off cuts to pay-outs that were once unthinkable for the sponsoring states, for income stability, employers, and the working-age people. Under the prevailing circumstances, public and private pension systems could face some of the following pension reforms challenges in the short term[11]:

- **Reducing benefits**
  Accepting lower post-retirement income is not an easy sell. This is clearly exemplified in recent developments in the Netherlands.

- **Delaying the age of retirement**
  Increasing the official retirement age has been an important part of the labour market, which is difficult to implement and has led to widespread protests in different coun-tries. However, it is necessary to maintain

[9] *https://www.marketwatch.com/story/low-interest-rates-are-compounding-the-big-problems-facing-pension-funds-2019-08-30*
[10] *https://www.oecd.org/finance/financial-markets/48537395.pdf*
[11] *Governor Lars Rohde of Investment and Pensions Europe Conference, Copenhagen https://www.bis.org/review/r191203c.pdf*

long-term sustainability of public–private finances in the face of population ageing.

- **Increasing contributions**
  Catch-up in contributions may be needed to mitigate the unexpected financial downturn. Current workers, including those close to retirement age may have to implement higher contribution rates. This will be challenging because of the limited economic growth we expect to see in the next few years. If savings do increase, it may dampen liquidity in the market and curtail private consumption.

Many countries will, sooner or later, be flooded by some of the challenges mentioned. For example, the Netherlands and Denmark have a first class and robust retirement income system that is sustainable and has a high level of integrity. Yet, protests broke out across the Netherlands on June 1, 2019 against the new pension reforms aimed to increase the retirement age, signalling uncertainty over income in old age. The planned reductions in interest rates, which took effect in January 2020, have shaken a country renowned for having one of the world's strongest pension systems. It serves as an early warning to others about the impact of a record-low interest rate environment across Europe. If these highly awarded pension retirement systems have observed protests, what is to be said of how the environment will change after the Covid-19 disruption.

Ageing to remain an exacerbating factor

Ageing is expected to be rapid in Greece, Korea, Poland, Portugal, the Slovak Republic, Slovenia and Spain, while Japan and Italy will remain among the countries with the oldest populations[12] . A majority of the countries are grappling with the social and economic impacts of ageing population, as retirement income systems come under pressure due to declining birth rates and increasing longevity. Over the last 40 years, the percentage of people older than 65 years of working age (20–64 years) has increased from 20 to 31. By 2060, this number would likely double to 58.

However, upcoming experience studies will likely account for pandemic effects, especially aging for the retirement ready-age group. Covid-19 mortality rate effect could drive experience changes of the 65 and above age group.

According to the OECD, an increase in the old age to working age ratio reduces the capital. This is particularly important for DB plans as retirees spend their savings to pay for their lifestyles. Ageing has affected the natural rate of interest, i.e., equilibrium interest rate, via at least three channels. First, the declining working-age population effectively increases capital stock per person, lowers the marginal product of capital, and decreases demand for capital, thus leading to a reduction in the investment rate. Second, higher life expectancy increases the stock of capital as individuals need to save more for longer in order to meet their cash flow requirements for retirement.

Covid-19 could result in a one-off shock to longevity experience as the overall rate of those infected is around 2.3%[13] but in Italy has exceeded 8%[14] as of March 2020. This impact of increasing mortality may have both positive and negative effect on the liabilities as the pension insurance is constructed of two building blocks:

- Old age pensions - benefits are payable if the insured is alive at the pre-agreed age
- Survivor pensions -benefits are paid as a pension to widow and orphans if the insured dies

For those pension insurers whose policy mix is concentrated in old age benefits conclusively, there will be no solvency problems due to pandemic mortality. But, for those pension insurers whose policy mix is concentrated on survivors benefits, there may be a solvency impact.

As ageing continues, the risk appetite typically decreases as savers are more inclined to engage in wealth preservation as opposed to wealth growth strategies. This will reduce the exposure to variable rate investments such

[12] *https://www.oecd.org/pensions/countries-should-strengthen-pension-systems-to-adapt-to-changing-world-of-work.htm*
[13] *https://www.theactuary.com/news/2020/coronavirus-adds-100bn-to-pension-deficits-in-a-week/*
[14] *Johns Hopkins University, 2020*

as stocks. The business cycle also affects risk preferences. The negative shocks of economic crises can induce strong, rapid risk-off sentiment that pushes the natural interest rate down in the short term.

Conclusions and how CRISIL can help

Funds are devising strategic plans as investment returns will continue to flatten. Lower interest rates have impacted pension funds and insurance companies offering annuities to pensioners for over a decade. The global pandemic triggered by Covid-19 in the first quarter of 2020 calls socially responsible organisations to account for this shock in the business agenda and mitigate any negative financial impact. Some asset managers, pension trust funds, insurers, and pension insurers, are running stress scenarios to measure the short and long term effect of the pandemic and shape their strategic plans accordingly.

Most pension funds will de-risk and tend to move into bonds instead of equities as yields fall, according to a Bank of England's analysis[15]. This is especially true of funds with financially weaker corporate sponsors. Only those with stronger corporate sponsors and small deficits may seek to move out of bonds and invest in equities. On the other hand, schemes with low levels of hedging and a high allocation to high growth assets may find themselves in an even more challenging situation.

Strong capabilities on de-risking will take shape. Some investment funds are coping with the low interest rate environment by taking on more risk or strategically moving into alternative investments.

Diversification will be put off. Over the past decade, pension providers have diversified and changed their asset allocation mix. Moving into riskier assets with higher returns may have offset the drop in yields. Exposure to alternative and less liquid assets such as real estate and infrastructure was also on the rise prior to the pandemic.

But this may be on hold for some time as other possibilities – such as private equity and consolidation driven mergers and acquisitions – manifest. Also, large pension funds managers are playing an important role in providing the much-needed investments to mitigate climate change and support the transition to a low-carbon economy.

However, on the other side, there are several risks to be wary of.

First, many of these assets are untraded, such as in the case of private equity or alternative assets. This makes it difficult to estimate expected return and price risks correctly, as they are marked-to-model instead of marked-to-market.

Second, a larger share of illiquid assets in portfolios increases liquidity risks. These investments are also more susceptible to recession as likely to commence with the impact of Covid-19 pandemic on the markets, which will eventually spill over to certain private and alternative asset sectors as well.

Third, pension companies' liquidity needs will become even larger from 2023[16], when the requirement for central clearing of interest rate swaps and other derivatives is introduced. Setting aside more liquid assets to cover liquidity risks also means fewer funds available to invest counter cyclically. Pension funds will then have less flexibility to buy assets traded at distressed price levels.

CRISIL continuously provides advice to banks, insurers, and pension funds. Our experts can help you navigate the challenging environment by supporting normalisation of your workforce in many of your critical business functions in finance, trading, and risk management.

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[15]https://bankunderground.co.uk/2020/01/07/bitesize-what-might-pension-funds-do-when-bond-yields-fall/
[16]Governor Lars Rohde, Investment and Pensions Europe Conference, Copenhagen https://www.bis.org/review/r191203c.pdf

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