Pension funds and the financial crisis

The financial crisis affects all segments of the financial industry and the financial markets. Pension funds are no exception. In 2008, the crisis caused pension fund returns to fall by up to 35%. However, losses differed greatly by country.

How much does the global financial crisis threaten pension fund assets and subsequently put retirement security at risk? This is one of the crucial questions being asked about the social and political consequences of the crisis. The issue is particularly important as pension reforms all over the world have attempted to strengthen the funded elements of pension systems.

There is no question that the financial crisis is a serious challenge to pension funds all over the world. However, the impact and the depth of the challenge vary. Pension fund performance data for 2008 show that Ireland was hit hardest followed by Hong Kong, the United States and Japan. Meanwhile, pension funds in Italy and Germany suffered comparatively minor losses.

Why the big difference? The key factor was exposure to falling equity markets. In 2007, 66% of Ireland’s pension fund assets were invested in equities, while Italian pension funds had invested 20% in equities. Therefore, each country’s vulnerability to falling stock markets has differed substantially. Meanwhile, many pension funds could profit from the favourable development in the government bond market in 2008. The direct exposure of pension funds to toxic assets is moderate, but not insignificant. According to the OECD, 3% of pension fund assets are invested in toxic assets.

How deeply each country’s pension plan members have been hit by the crisis not only depends on pension fund losses, but also on how much funded pensions contribute to retirement income, which differs very much from country to country.

Consequences for defined benefit plans

The risk of funding gaps for defined benefit plans has risen substantially because of the financial crisis. Funding levels in most OECD countries have fallen below 90%. In the Netherlands, the ratio has dropped to less than 95%, while the minimum ratio is 105%. At the same time, interest rates have been falling fast in response to the financial crisis and the global recession. This means that the return on newly issued bonds is falling. Even more important, pension fund liabilities rise in general because the discount factor falls in line with interest rates, so that the present value of liabilities increases.

Funding level reductions can lead to shifts in pension fund investment strategies, to cuts in pension promises or to requests for additional contributions. Cuts in
pension promises could include stopping indexation of benefit payments or only partially indexing payments. Additional contributions from sponsors could restore the funding level, but getting the money is difficult during a recession. Regulations on funding ratios and recovery periods strongly influence the changes made to a pension fund’s investment strategy. In underfunding situations, pension fund managers could reduce investments in equities to minimize the risk of a further decline of the funding level. Doing this could just make the crisis worse. Pension funds are considered market stabilizers that prevent wide market swings because fund managers typically invest for the long term rather than selling in a downturn. However, the requirement to recover funding ratios relatively quickly in most defined benefit markets might result in pro-cyclical investment behaviour.

Some governments have taken action to prevent unfavourable consequences from recovery period rules. In the Netherlands, the minimum funding level for pension funds is 105%. If funding falls below that number, managers are required by law to reach the minimum level within three years. Earlier this year, the government decided to give an additional two years for pension funds to reach the required funding level. The reason this was done was to avoid cutting retirement benefits.

Generally, the financial crisis is very likely to lead to an increased focus on risk management of defined benefit funds. In this context, it can be expected that Liability Driven Investment strategies will become more popular, because matching investments and liabilities reduces the underfunding risk of defined benefit plans.

Consequences for defined contribution plans

The consequences for defined contribution plans are felt more directly by plan participants. In a (pure) defined contribution system with individual accounts, falling asset values lead to fewer retirement assets and therefore to less retirement income in the future. Hong Kong and the USA come close to this kind of defined contribution system and in both countries plan participants suffer from severe losses. Employer-sponsored defined contribution plan assets in the USA fell 22%, which means absolute losses of 1 trillion US-Dollars, whereas the Mandatory Provident Fund system in Hong Kong had losses of 30%4.

It is worth noting that only a small percentage of future retirees – those who will retire soon – is directly affected by the crisis5. These people lack the time it will take for asset prices to recover. That means, in theory, the losses translate directly into their retirement income. However, many countries with defined contribution systems, especially those with mandatory systems, have guarantees of various kinds on their schemes. 

---

Besides, defined contribution systems are not necessarily equity-driven, but assets can be invested in many other asset classes. The vulnerability depends on the investment strategy chosen. For example, Hong Kong’s Mandatory Provident Fund system breaks down like this: mixed funds are most popular followed by equity funds, capital preservation funds, guaranteed funds, bond funds and money market funds. Between March 2008 and 2009, the results from the last four types of funds ranged from a gain of 0.7% to a loss of 5.1%. Capital preservation funds had a small positive return while bond funds lost 3.9% in value\(^6\). The Hong Kong fund’s massive overall loss of 30% resulted from the declines of mixed and equity funds.

There are ways to prevent soon-to-be pensioners from being over-exposed to the stock market when they approach retirement. First, life-cycle funds factor in a person’s age so that the person takes on more risk when young and less risk as retirement nears. These funds also provide a well-diversified portfolio. Second, the default option needs to be carefully designed. Most retirement plan participants are enrolled in the default option, thus its design has a substantial effect on retirement income security.

**The financial crisis and pensions policy**

The financial crisis is a severe stress test for funded pension systems. Future pensioners are unsure what to expect financially from the funded pillars, especially after years of reforms aimed at strengthening funded pension provisions. However, the performance of funded pension plans and the contribution of funded pensions to retirement income security need to be judged with a long-term perspective. If history is any guide, then the long-term value of retirement assets will not be substantially affected by the current crisis. A look at the performance of pension funds in countries with a substantial share of funded pensions in retirement income shows that, despite the current crisis, long-term asset returns have been considerable. Over the last 15 years, British, American and Swedish pension funds had annual returns ranging from 9% to 12%. The rise in return happened during a time frame that includes large parts of the current financial crisis, separate recent crises in Russia and Asia as well as the bursting of the internet bubble.

A long-term perspective also helps one realize that demography is very likely a more severe challenge to a person’s retirement income security than financial market swings. Upcoming demographic developments will prevent the return of dominant public pension systems. For example, the unfavourable demographics in Europe will lead to an increase of public pension expenditure for the EU-27 countries of 1.2 percentage points of GDP between 2007 and 2030 and of 2.2 percentage points between 2007 and 2050. Total public ▶
pension expenditure will amount to 12.4% of GDP in 2050. To put that figure into perspective, the economic stimulus packages launched by EU member states and the EU itself to battle the current crisis amount to 1.5% of the EU’s GDP.

The crisis should not force us to question the overall goal of years of pension policy. The aim has been to create multi-pillar pension systems by strengthening funded pensions. Retirement savings and retirement income are subject to a whole variety of different risks. Naturally, investment risk is currently a focus of discussion, but it should not be forgotten that risk is not unique to funded pensions. Public pension benefits are subject to inflation and political risks. Therefore, the demographic outlook and risk diversification being provided by multi-pillar systems remain very compelling reasons to further pursue the strengthening of funded pensions.

Dr. Alexander Boersch
alexander.boersch@allianzgi.com
publications.allianzgi.com