

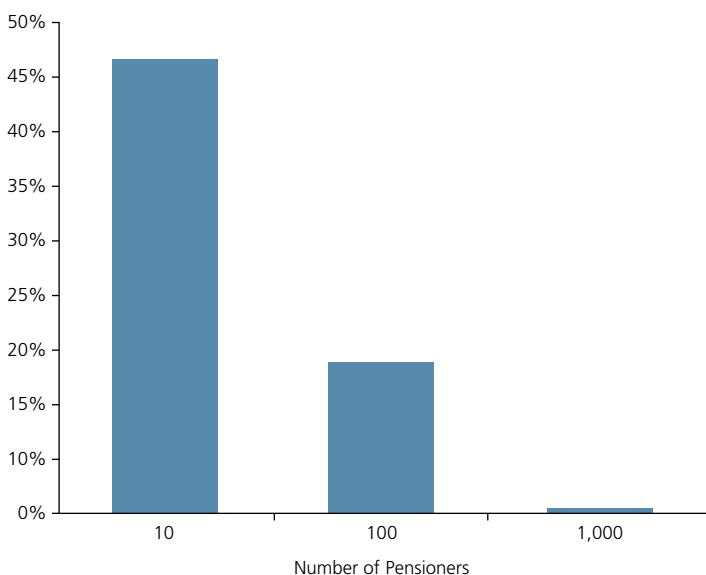
# Mortality Risk for Small Pension Schemes

One of the many uncertainties that your scheme faces is how long its pensioners live. Unusually this risk is proportionately higher for smaller pension schemes than for larger ones.

The concept of diversification has always been an important consideration in setting a scheme's investment strategy. The rationale is that by investing the scheme's equity or bond portfolio in a range of stocks covering different industries and locations the overall investment return is less volatile.

The same theory also applies to the mortality experience in a pension scheme. Here the diversification comes from spreading the mortality risk over a number of different members. The more members there are the greater the diversification and therefore the more predictable the experience.

## Probability that the actual cost is 5% more than expected



Source: BW model



This means that schemes with a smaller number of members run a much higher level of mortality risk (pro rata) because the extra cost of one individual living much longer than expected is more significant in terms of the scheme's liabilities. But how small does a scheme need to be for this diversification issue to be untenable?

The graph opposite shows the probability that the actual cost of paying an example scheme's pensioners is 5% more than the expected cost. Due to the diversification this varies depending on the number of pensioners in the scheme.

It should be noted that these probabilities ignore the risk that the mortality experience for the population as a whole is worse than currently predicted and this is a major additional risk. The probabilities assume that the financial assumptions are borne out in practice.

## Summary

Many schemes have taken steps to reduce the investment risks associated with their scheme by investing a portion of the assets in bonds. However, such schemes remain exposed to mortality risks, which can be as significant. The mortality risks are even greater for smaller schemes as they are not able to benefit from diversification across a large number of members seen in bigger schemes.

The main option available to smaller pension schemes looking to remove the mortality risk would be to purchase a bulk annuity policy. If the scheme has adopted a more cautious investment strategy that includes bonds to match a portion of its liabilities (e.g. the pensioners) then a buy-in policy may not significantly increase a scheme's anticipated costs.

The advantage is, however, that it would remove the mortality risk. An exercise to consider whether buy-in is a viable option need not be overly complex and can be carried out relatively cheaply. This would enable the company and trustees to judge the value of a policy compared with the status quo.



## For further information

Please contact your usual Barnett Waddingham consultant if you would like to discuss this issue in more detail.

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