



This note reviews employee owned life insurance plans and the portability option (port), discusses anti-selection in port and suggests that mortality assumptions utilize a recently published Society of Actuaries (SOA) mortality study!

Employee Owned Life Insurance

The ability to take insurance with you when you leave your employer is common in group term life insurance. Port is sometimes available in individual-issue programs such as executive owned life insurance (EOLI), group term carve out (GTCO) and Worksite programs, all of which are sold to multiple lives in the workplace, and which we will refer to as "employee owned life insurance" for our purposes here. Permanent life insurance is usually sold in these programs.

This raises the following questions:

- 1) What mortality assumptions should the pricing actuary make for the portability option in employee owned life insurance programs?
- 2) How much anti-selection appears to occur in ported business? What facts about anti-selection can we substitute for these appearances?

According to a new SOA study, overall port mortality is **418 percent** of base mortality in group life insurance. This level of increased mortality persists for up to 15 years or more following the port election.

In contrast, many companies writing employee owned life insurance assume port mortality of approximately 125 percent to 150 percent of base mortality. Further, port mortality can vary from approximately 200 percent to 700 percent of base mortality, depending on factors such as face amount, attained age and underwriting performed at time of port.

Employee Owned Life Insurance and the Port Option

Employee owned life insurance plans use permanent insurance to replace or augment the group term life coverage provided by an employer in a basic employee benefits package. Insurance is typically offered on a Guaranteed Issue basis, with Simplified and/or Medical Issue available for older issue ages or special cases. The insurance policy is employee-owned and portable if he leaves the group.

EOLI and GTCO provide coverage limited to a corporation's executives or partners. Death benefits are usually higher than the group term coverage being replaced or augmented. Typically, there are mandatory and voluntary coverage options, with the employer paying the cost of insurance and fees for mandatory coverage. Employees can contribute additional amounts for mandatory coverage and usually pay the full amount of any voluntary coverage.

In contrast to EOLI and GTCO, Worksite programs cover all employees and sometimes spouses and children. Death benefits are similar to group life amounts and are usually only offered on a voluntary basis. Despite differences among Worksite, EOLI and GTCO, the discussion of port mortality applies to all three.

The following are four key aspects present in EOLI and GTCO:

- Eligibility, when limited to executives and other highly compensated individuals, is correlated to lower mortality, which is attributed to greater access to healthcare and other socioeconomic factors.
- High participation rates (such as 90 percent to 100 percent) ensure that both healthy and less healthy individuals are covered.

Munich Re Portability Mortality in Employee Owned Life Insurance

- Death benefit amounts defined by formula (such as a multiple of base salary) remove the option for a less healthy employee to select a higher face amount due to his condition.
- A robust Actively at Work definition applies to those eligible for the insurance. For example, each eligible employee may be required to have worked for the employer for 90 days, be currently working full-time (30+ hours per week) and not have missed more than five consecutive days due to illness or injury in the past 90 days.

The Portability Option

Upon retirement, resignation or termination, the employee has the option to keep the policy and pay the full insurance premium. The cost to the employee may increase considerably if the employer paid for mandatory coverage during employment. The default option if the insured takes no action varies from lapsing the policy to keeping it in force. In some plans, the insurer charges higher premiums or cost of insurance rates for ported policies.

Anti-selection in Port

In the portability context, unhealthy insureds select against the insurer by keeping insurance coverage while healthy insureds may not keep coverage.

- If you leave and take a new job, the new employer
 will usually offer similar employee owned life insurance
 coverage. As a result you will not need to port coverage
 from the previous employer. If, however, you leave the
 group and do not or cannot take a new job, or if you
 retire, you have a greater need for coverage.
- Healthy persons can undergo underwriting and get a
 better rate than the port cost, but less healthy persons
 have fewer options. If they undergo underwriting they
 will not necessarily get an attractive rate, and in fact
 might be declined. Thus, they elect to port their policy.
- The 2016 SOA Group Term Life Experience Study includes experience for policies in force anytime during 2010-2013. Mortality results include portability experience, which was added to the study for the first time and includes 235,000 life years and 2,400 claims.

The study is accompanied by a pivot table that can be filtered by characteristics such as face amount, attained age and underwriting performed at time of port. It is available on the SOA Website. Navigate to the "Research" tab and select "Life & Annuities."

Overall port mortality is 418 percent of base mortality for employer-paid basic coverage. Mortality can vary from approximately 200 percent to 700 percent of base mortality, depending on these factors.

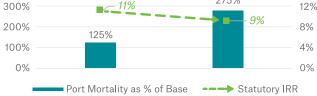
A sample block of Guaranteed Issue GTCO illustrates the impact of differing portability mortality assumptions. We modeled a hypothetical block of new business with issue ages, face amounts and other characteristics representative of GTCO business in the Munich Re portfolio. We filtered out face amounts under \$150,000 to reflect the higher amounts offered in GTCO while maintaining a reasonable claim count for credibility purposes.

Port mortality is 372 percent of base mortality based on the remaining 56,000 life years and 350 claims. We further decreased the factor to **275 percent** to account for differences in salary, collar and other characteristics not reflected in the study. We assumed that over time 12 percent of the group ports and most ports occur in durations three through seven, consistent with the higher mortality level and one insurer's GTCO data. Port mortality is applied for 15 years after porting, consistent with the SOA study's finding that high mortality persists to attained ages near 70.

The Result

Statutory IRR decreased from 11 percent to 9 percent when port mortality was increased from 125 percent of base mortality to 275 percent of base mortality.

GTCO Statutory IRR



Thus, you can see that the decision to offer a portability option in your Employee Owned Life Insurance program should not be taken lightly.

References:

1: Group Life Insurance Experience Committee and Society of Actuaries, 2016 Group Life Insurance Experience Committee Report and 2016 Group Term Life Mortality Tables, 2016, available at https://www.soa.org/Research/Experience-Study/Group-Life/2016-group-life-mortality-study.aspx



David Elias, FSA, MAAA Associate Actuary Munich Re, U.S. (Life) delias@munichre.com