On August 9, 2011, SCOR SE, a global reinsurer with offices in more than 31 countries, acquired substantially all of the life reinsurance business, operations and staff of Transamerica Reinsurance, the life reinsurance division of the AEGON companies. The business of Transamerica Reinsurance will now be conducted through the SCOR Global Life companies, and Transamerica Reinsurance is no longer affiliated with the AEGON companies. 

While articles, treaties and some historic materials may continue to bear the name Transamerica, AEGON is no longer producing new reinsurance business.

Archived Materials

The Role of Suicides in Trauma Claims

During the Great Depression of the 1930s, one heard anecdotally that suicide rates increased during the peak of the financial crisis. Now that the latest economic meltdown appears to have bottomed out, it seems appropriate to take a look at reinsurance trauma claims over the past few years to see if a similar trend is occurring today.

Transamerica Reinsurance maintains an historical database of paid claims, which keeps track of such things as policy issue date, age of death, reinsurance liability amount, original policy face amount and (most importantly for this analysis) cause of death. For incurred dates during calendar years 2007-2010, the database contains approximately 61,400 claims with a specific reported cause of death (other than miscellaneous, unspecified or unknown). The total reinsurance accepted liability on these deaths having a known cause comes to $3.8 billion.

Trauma Claims During Contestability Period

Figure 1 compares the distribution of reinsurance claim amounts arising from suicide, motor vehicle accident, other trauma and medical causes over the past four years. While the percentage of claims from medical causes (light blue bars) has remained stable, there has been a dramatic increase in the percentage from suicides.
Suicide claim count is the same but claim size has grown. This increase in the suicide claim payment percentage is due almost entirely to an increase in the average reinsurance claim amount. A review of the count of claims reveals that the suicide percentage has remained around four percent over the past few years with only a slight upward tick in 2010. However, the average reinsurance claim amount has increased from about $80,000 in 2007 to just over $139,000 in 2010. Figure 2 indicates a bias toward larger claim size for all trauma claims in recent calendar years compared to medical causes.

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>2007</th>
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<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>Suicide</td>
<td>80,000</td>
<td>119,000</td>
<td>118,000</td>
<td>139,000</td>
</tr>
<tr>
<td>Motor Vehicle</td>
<td>92,000</td>
<td>76,000</td>
<td>98,000</td>
<td>86,000</td>
</tr>
<tr>
<td>Other Trauma</td>
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<td>91,000</td>
<td>107,000</td>
<td>101,000</td>
</tr>
<tr>
<td>Medical</td>
<td>57,000</td>
<td>57,000</td>
<td>57,000</td>
<td>58,000</td>
</tr>
</tbody>
</table>

Figure 2: Average Reinsurance Claim Amount by Cause of Death (nearest $1000). Suicide claim size jumped 50 percent from 2007 to 2010.

It is a little surprising that suicides are a significant portion of Transamerica Reinsurance’s trauma claim payments, given the two year contestable/suicide periods contained in most of our client policy forms. A deeper analysis of early duration claims (Figure 3) reveals some interesting patterns. The astute observer should wonder why there are suicide claims in policy years one and two. Reasons for this include (1) a couple of states require a one year suicide period, (2) some client companies paid benefits on suicide
claims where the cause of death was questionable, and (3) a small number of policy conversions/exchanges/re-entries have erroneous policy issue dates.

Figure 3: Cause of Death by Early Policy Year. The jump in suicides coincides with a drop in trauma deaths.

Comparing the three non-medical trends, the next question is: why the sharp drop in motor vehicle and other trauma claims in the same year suicide claims increase due to the end of the typical contestable period? The total percentage from these three causes combined stays level over the first five policy years. Could motor vehicle accident and other trauma claims filed during the contestable period actually be misidentified suicide claims? A detailed look at trauma claims provides some additional support for this case.

Misreporting Effect May Be Worse at Higher Face Amounts
Figure 4 provides a more detailed breakdown of trauma claims during the first three policy years. Motor vehicle, other injury, homicide and aviation accident claims all show decreased percentages in policy year three. Drowning, drug overdose-accidental and all other trauma claims show a decrease in policy year two. Also notice the overall percentage in year one is much larger than years two and three.
Figure 4: Distribution of Claim Amounts for Selected Trauma Causes. Some early policy year trauma claims could in fact be suicides.

Taken together, these patterns could imply that some of the trauma claims are misidentified suicides. On the surface, this might indicate that the insurance industry’s suicide clause is not providing adequate protection against individuals with a strong financial motivation to end their lives.

An examination of early policy year reinsurance claims, segmented by the size of the original underlying policy, provides further evidence. Figure 5 indicates a clear trend of increasing suicide percentages by face amount for claims occurring in the first five policy years. Notice, however, that the same trend appears for other trauma causes for policies of $500,000 and over. In the $1,000,000 and over segment, a large portion of the other trauma group consists of drug overdose, drowning and aviation accident claims. Could wealthier individuals have more choices available to disguise their suicides?
Figure 5: Distribution of Policy Years 1-5 Reinsurance Claims by Underlying Policy Face Amount. Suicide claim proportion increases as face amount increases.

Figure 5 also shows the impact of the more thorough underwriting that takes place on larger policies. The percentage of early policy year claims due to medical causes declines from 75-80 percent for policies under $500,000 to under 70 percent for policies $500,000 and over.

A review of all trauma claims by age at death (Figure 6) reveals no unusual patterns. As age at death increases, medical causes overwhelm all other causes, and any anti-selective behavior related to suicides would have little financial impact on the business.

Figure 6: Distribution of Claims by Age at Death. Anti-selection related to suicide is a significant concern at younger ages but a vanishingly small one at higher ages.
Summary
This brief review of recent trauma claims has uncovered a couple of potentially troubling issues. First, while the number of suicide claims remained stable during the economic crisis, the dollar amount of these claims increased significantly in 2010. This implies an increase in anti-selective behavior on the part of policyholders. Time will tell whether this is a short-term trend or whether it will continue into the next decade.

Second, there is some evidence to suggest the insurance industry is experiencing contestable period suicide claims that are being misidentified as other causes. If this has been occurring for a while at a consistent level, then any mortality implications should already be built into the industry’s pricing.

However, if anti-selective behavior is on the rise, then this is the time to contemplate possible corrective actions. The industry should at least strive for more accurate cause identification during the contestable period.