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Demystifying Premium Deficiency Reserves

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The terminology and recognition of premium deficiencies has become increasingly familiar to insurance companies in recent years. This is largely the result of soft market conditions which have motivated many companies to maintain premium pricing while incurring consistent or sometimes more unfavorable claim development in order to remain competitive. Higher loss ratios have resulted in wider applicability of premium deficiencies to companies within the property and casualty industry and have made it critical for management to gain an understanding of the conceptual basis, requirements and key factors that trigger recognition.

Defining PDR

A premium deficiency for short term contracts is conceptually defined by generally accepted accounting principles (GAAP) as a probable loss on premiums in force yet to be earned at the company's financial statement measurement date. GAAP indicates that premium deficiency reserves (PDR) should be recognized if the sum of expected claim costs and claim adjustment expenses, expected dividends to policyholders, unamortized acquisition costs, and maintenance costs exceeds related unearned premiums. The accrual of PDR within GAAP is historically rooted in the loss contingency accounting guidance, which requires a loss contingency to be accrued by a charge to income if it is both probable that an asset has been impaired or a liability incurred at the date of the financial statements and that the loss can be reasonably estimated.

The concept and recognition of PDR under statutory accounting practices (SAP) required by the NAIC outlined in Statement of Statutory Principle (SSAP) No. 53 are similar to GAAP with the exception of the exclusion of deferred acquisition costs (DAC), which are fully expensed under SAP. SAP mirrors GAAP guidance pertaining to the grouping of contracts to determine PDR and explicitly states that deficiencies shall not be offset by anticipated profits in other policy groupings.

KEY POINTS

- Recent market conditions may result in wider applicability of premium deficiency reserves.
- PDR's for separate business segments can't offset one another.

Recording PDR

When a premium deficiency exists, the amount of the deficiency must first be offset against any DAC recorded at the Company's financial statement measurement date. Any remaining deficiency not absorbed by DAC is accrued for as a separate premium deficiency liability on the balance sheet. For SAP filers, the full PDR is recorded as a liability. The offsetting expense is presented within the statement of operations and is not deductible for federal income tax purposes.

Methods Used to Calculate PDR

When calculating a PDR, a company must first adopt a methodology by choosing between including anticipated investment income or excluding it from the calculation of PDR. The exclusion of anticipated investment income simplifies the calculation but generally results in higher reserves. There are no prescribed methods for calculating anticipated investment income; however, there are two main methods that are predominantly used in practice:

1. Income Approach
2. Discounting Approach

The Income Approach anticipates investment income on the cash flows generated by current in-force contracts and the Discounting Approach discounts expected future payments for claim costs, claim adjustment expenses, and maintenance costs. Both methods incorporate the time value of money. Within these two methods, numerous distinctions exist.

Actuarial and Accounting Considerations Impacting PDR Calculation

The calculation of expected claim costs and claim adjustment expenses associated with segments of business often requires an actuarial analysis. An actuary familiar with a Company's book of business can factor in the responsiveness and stability of the loss development assumptions used in projecting ultimate losses. The construction of assumptions used in estimating ultimate losses should be carefully applied to the unearned portion of the premium. For example, if the current policy period has an unusually low loss ratio, a loss ratio associated with a longer term, perhaps a 3 year average, may be more appropriate to use when calculating the PDR of a business segment. Changes in mix of business, changes in underwriting philosophy and recent rate changes are among other factors that should be considered as well.

For the purposes of developing losses to their ultimate value, business segments should be created to satisfy the accounting guidance provided in SSAP 53 and GAAP ASC 944. Since indicated PDR by business segment can't offset one another, the rationale for business segment grouping (personal lines versus commercial lines, annual statement line of detail, direct business versus net business) should be documented in sufficient detail to support compliance with underlying SAP and GAAP guidance.

Given the expense and complexity of the detailed calculations needed to calculate a PDR, a 3 tier approach has been suggested to assess the need for reserves.

Tier 1 – Does the unearned premium for business segment have an anticipated combined ratio[1] below 100%? If so, a PDR may not be needed.

Tier 2 – Can PDR of $0 be supported for a business segment, using a reasonable discount rate assumption? If so, a PDR may not be needed.

1 The combined ratio is suggested for Tier 1 because it is readily available from an insurance company's financial statements. The ratio contains some general expenses beyond maintenance costs, such as management and auditing expenses, that may ultimately not be factored in determining if a PDR exists. These expenses are typically removed for the full calculation of PDR required in Tier 3.

Tier 3 – Full calculation of PDR for the business segment with collaboration between actuaries and accountants. It is possible during Tier 3 that sets of reasonable assumptions exist to support a $0 PDR ending the calculation process. Companies should prepare this analysis with sufficient documentation to satisfy both actuarial and accounting professional guidelines.

No Unearned Premiums = No PDR

Companies that do not carry unearned premium on their books at their financial statement measurement date are not typically subject to premium deficiency requirements. The exception to this rule occurs within companies that are obligated to provide coverage that extends beyond the stated policy period, such as financial mortgage and medical stop loss insurers, which are subject to analyses that differ from those discussed within the scope of this article.

Current Practices

As of 2011 the test for the need of a PDR must be commented on in Property and Casualty Statutory Annual Statement Note 30 by all companies, regardless of whether or not a PDR is required. Despite this requirement, many companies make no disclosures in Note 30. Note 30 requires companies with a PDR to disclose the following information:

1. The liability carried for PDR
2. The date of the most recent evaluation of PDR
3. Whether or not anticipated investment income was used in calculation of PDR

Previous studies have indicated industry PDR levels at less than 1% of net written premium (NWP). Further, the number of companies that filed a PDR was quite small and assumptions regarding consideration of investment income varied considerably.

To continue this research, we analyzed a dataset looking at the PDR as filed in 2012 Note 30 for:

1. The top 20 groups or single entities by Direct Written Premium (DWP)
2. Companies with a 3 Year Income Ratio less than -15%. The Income Ratio used is simply derived from the Five-Year Historical Data exhibit in the annual statement and is a three year average of Net Income over Net Premium Written

Each company considered for criteria #2 above had over $1 Million of NWP in 2012 and was not a single entity or member of an insurance group used in criteria #1.

Based on the above criteria we analyzed 581 single insurance companies of which 23 (3.96%) had a PDR. Interestingly, only 4.55% of the companies analyzed with regard to item #2 above had a PDR. The dollars of PDR, for all companies we reviewed, were $1.759 billion, or 0.55% of DWP. Below is a table expressing these findings:

Companies	Direct Written Premium (000's)	# Cos. Observed	# of Cos. PDR	% of Cos. with PDR	Dollars of PDR (000's)	Dollars of PDR to DWP
Top 20 Groups	311,820,734	471	18	3.82%	1,051,550	0.34%
Income Ratio	7,995,532	110	5	4.55%	707,847	8.85%
Total	319,816,266	581	23	3.96%	1,759,397	0.55%

There were inconsistencies noted in the verbiage and in the amounts shown in Note 30. While the majority of our 23 PDR examples listed the note's required information, several went further to provide more meaningful details to the regulators. More insightful detail may well be warranted given the chart below. Of the companies with a PDR, the PDR represented about 2.95% of 2012 DWP.

Companies with a PDR	# Cos. Observed	Direct Written Premium (000's)	Dollars of PDR (000's)	PDR as % of DWP
Top 20 Groups	18	58,616,860	1,051,550	1.79%
Income Ratio	5	1,081,178	707,847	65.47%
Total	23	59,698,038	1,759,397	2.95%

Apart from the dollar amount of the PDR, companies have to indicate the date of the most recent evaluation of the liability and if investment income was taken into account. One company answered "no" to the question of using anticipated investment income while the other 21 that filled out a complete note answered "yes". Further, one group mentioned they used a 2.5% rate for this calculation. Mentioning the rate as a side comment may ease regulatory concerns that an excessive rate was used. There was also a decent range of variability in the timing of the PDR calculation. Several carried the PDR amount forward from a 9/30/2012 analysis of required reserves while several others appeared to do this calculation soon after year-end.

Many of the annual statements had side commentary with Note 30 to provide additional insight. Some companies mentioned the write-in line in the annual statement where this reserve amount appears. Other companies added details indicating the line/segment of business that caused PDR. Such observations include multiple peril crop insurance, health insurance and umbrella/excess liability.

One of the companies observed, provided the required detail for the PDR for the current and past year's annual statement. Oddly, none of the notes read contained information regarding how business segments groups were assembled. This is considered by many to be the most ambiguous part of a PDR calculation.

This commentary is not prescribed by the NAIC, however, amending current practice to require details regarding the segments of business that produce a PDR could benefit the NAIC. Part of the mission of the NAIC is to "Promote the reliability, solvency and financial solidity of insurance institutions" and details about this reserve, especially if it is large in magnitude, may help regulators better understand a company's financial position.

CONCLUSION

It is important that companies remain proactive and work with their actuary, accountant, risk manager and other specialists during the initial underwriting process prior to policy inception in order to avoid the detrimental impact premium deficiency reserves could have on their operations and capital and surplus. In the event that a PDR is necessary, the company should take the time to document its calculation and methodology to ensure compliance with required accounting guidance. Further disclosure in the annual statement Note 30 could provide regulators more useful information regarding causes of PDRs and ways companies are addressing them.

ABOUT THE AUTHORS

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Erich Brandt is a Consulting Actuary with Pinnacle Actuarial Resources, Inc. in the Bloomington, Illinois office, with fifteen years experience as an actuary.

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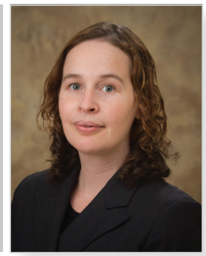
Magali Welch is a Partner that has over 20 years of experience in public accounting. Magali's focus is providing audit services to the industries that Johnson Lambert serves: insurance, not-for profits and employee benefit plans.

Magali also oversees and coordinates the firm's webinars, newsletters and leads the firm's internal IT department. She also co-chairs Johnson Lambert's Technical Committee.

Prior to joining Johnson Lambert in 1994, Magali achieved Chartered Accounting designation while employed in Montreal, and she recently completed a three-year term on the AICPA Insurance Expert Panel. Magali has obtained an Associate in Accounting and Finance (AIAF) designation offered by the Insurance Institute of America. She also completed the International Financial Reporting Standards (IFRS) certification offered by the AICPA. Magali can be contacted directly at mwelch@johnsonlambert.com or 802.383.4831.



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ABOUT
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- PDR's for separate business segments can't offset one another.
- Annual Statement Note 30: what it contains versus what it should contain.