



Purchase Accounting: To Defer or Not to Defer?

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With the high level of merger/acquisition activity in the industry in recent years and the expectation that it will continue, purchase GAAP accounting (PGAAP) has become a common term in the vocabulary of the financial actuary. This article addresses a specific PGAAP issue companies have faced recently in implementing PGAAP, specifically, whether it is appropriate, under current purchase accounting guidance, to defer heaped renewal commissions. But first, let's review the fundamentals of PGAAP.

Refresher Course

Assume Company A buys the stock of Company B. Company B prepares historic GAAP (HGAAP) and statutory financial statements. The "opening" PGAAP balance sheet of Company B (that is, as of the acquisition date) is developed from HGAAP by an allocation of the purchase price to assets and liabilities such that the net assets on a PGAAP basis equal the purchase price:

- Assets are marked to market.
- Reserves are recalculated to "market" (that is, *FAS 60* reserves are recalculated by using a method similar to HGAAP but based on a market yield and current best estimate assumptions for mortality and lapse; *FAS 97* reserves remain at account value; *FAS 120* reserves remain unchanged).
- DAC is eliminated; DAC can be thought of as Company B's unrecovered investment in putting its business on the books. This is irrelevant to Company A (the purchaser).

- PVFP is established; PVFP can be thought of as Company A's investment in the purchased block of business.
- The HGAAP deferred tax asset or liability is replaced by a PGAAP deferred tax asset or liability.
- A goodwill asset is established equal to the price paid less the excess of the market value of assets, including PVFP, over the market value of liabilities.

The calculation of the PVFP is generally complex and requires a significant allocation of actuarial resources. A number of approaches exist for calculating the PVFP at the time of acquisition. One common approach is to begin with statutory pretax profits from an actuarial appraisal; adjust reserve changes, investment income, and other items (AVR, IMR, and so on) to a PGAAP basis; and discount these adjusted profits at a risk rate of return. *EITF 92-9* (guidance published by the AICPA's Emerging Issues Task Force) requires amortization of PVFP in proportion to premiums using the reserve interest rate on *FAS 60* business; for *FAS 97* business, PVFP is amortized in proportion to estimated gross profits (EGPs) using the credited rate. Prior to the adoption of *EITF 92-9*, certain companies amortized PVFP at the risk rate of return used to calculate the initial PVFP balance.¹ Nomenclature varies significantly among companies. One company's PVFP is another's PVP, VOBA (value of business acquired), COBA (cost of business acquired), or VIF (value of in force).

Aside from *EITF 92-9*, current authoritative guidance on purchase GAAP accounting is quite sparse. In making decisions on the appropriate approach for a purchase accounting situation, decisions are often based on extending *FAS 60* and *FAS 97* (and soon *FAS 120*) to a purchase situation and reviewing the emergence of profits generated under a proposed PGAAP approach.

To Defer or Not To Defer?

In several recent PGAAP implementation projects, companies faced a particular issue that is not directly addressed in accounting or actuarial literature. The question is, if the purchased business has a nonlevel renewal commission pattern, should future commissions in excess of ultimate levels be capitalized or expensed as incurred?

Conclusion

The best approach seems to be to capitalize heaped renewal commissions under PGAAP. Deferring these commissions is consistent with the GAAP guidance on deferrals, is consistent with HGAAP treatment, and results in a profit emergence pattern similar to that under HGAAP. In addition, failure to defer these commissions under PGAAP will penalize near-term earnings significantly if heaped renewal commissions are material. However, no definitive guidance exists that specifically permits or requires deferral; a number of approaches may be acceptable in particular circumstances.

The conclusion, with respect to deferral of heaped renewal commissions, extends easily to suggest the appropriateness of capitalizing excess first-year commissions paid after the acquisition date and excess front-end loads assessed after the acquisition date. Such first-year commissions can be very material in specific situations. The conclusions apply equally to *FAS 60*, *FAS 97*, and *FAS 120* business. In fact, although the illustration that follows is based on a *FAS 97* product with heaped

renewal commissions, this commission structure is more common on *FAS 60* and *FAS 120* business.

Illustration

Assume that a block of business consists of only one policy—a fixed-premium UL policy with an annual premium of \$1000, paid at the beginning of each year. The policy has just reached its first anniversary when the “block” of business is sold. The earned rate is 8%, while the credited rate is 5%. No lapses or deaths are assumed to occur; no COI charges are assessed. There are no loads and no issue or maintenance expenses.

HGAAP

Commissions are 60% in year 1, 5% in years 2–5, and 1% thereafter. Thus deferrals are \$590 in year 1 and \$40 in years 2–5. The *FAS 97* estimated gross profits equal interest earned less interest credited less the \$10 maintenance commission in each year. For simplicity, in this and all later calculations, I have ignored interest on the commissions. Under *FAS 97*, DAC is amortized in proportion to estimated gross profits at the credited rate. *For this illustration, however, the earned rate is used as the amortization interest rate. Use of the earned rate allows a demonstration of profit emergence as a level percentage of EGPs, a result that does not exactly occur when the amortization interest rate is the credited rate.*

The HGAAP calculations for Company B would be as shown in Table 1.

TABLE 1

	Account Value (BOY)	Assumed Spread (EOY)	Maintenance Commission	EPG (EOY)	Deferral (BOY)	DAC (EOY)
1	1,000	30	10	20	590	624
2	2,050	62	10	52	40	682
3	3,153	95	10	85	40	722
4	4,310	129	10	119	40	742
5	5,526	166	10	156	40	738
6	6,802	204	10	194	0	665
7	8,142	244	10	234	0	559
8	9,549	286	10	276	0	416
9	11,027	331	10	321	0	231
10	12,578	377	10	367	0	0
PV				1,062	722	

Amortization Ratio: $722/1,062 = 0.68$

We can see that FAS 97 HGAAP profits emerge as a level percentage of FAS 97 estimated gross profits by extending this example a step further. (Recall that this level profit pattern occurs only in the theoretically "pure" world in which the amortization interest rate equals the earned rate; in the real world of FASB pronouncements, use of the credited rate is mandated.) In preparing a GAAP income statement for this block of business, invested assets equal to the net GAAP liability (NGL, equal to account value less DAC) would be allocated to the line. The income statement for Company B would appear as shown in Table 2.

PGAAP

Now assume that Company A purchases the stock of Company B one year after Company B issued its one and only policy. Company A must now prepare PGAAP financials. The PVFP is calculated at the acquisition date as the present value of projected GAAP profits, discounted at a risk rate of return. The discount rate used in this calculation is often the hurdle rate used in pricing the block of business and is generally in the 12–15% range. The choice of discount rate is independent of the rate used to amortize the PVFP, which in accordance

with EITF 92–9 must be the credited rate. (But keep in mind that in this example, the earned rate is used.) Assuming no changes in assumptions from HGAAP to PGAAP, Company A calculates a PVFP of \$792, as shown in Table 3 on page 14. (Note that the acquisition occurred at the end of policy year 1, so that the projection of future profits begins with policy year 2.)

Company A evaluates two alternatives for developing an amortization schedule for PVFP:

- **Alternative 1.** Expense all renewal commissions as incurred and amortize the initial PVFP balance over the FAS 97 estimated gross profits. Because renewal commissions are not capitalized in this scenario, the calculation of estimated gross profits considers total renewal commissions as an expense. In this scenario, the estimated gross profits equal the interest spreads less *total* commissions and equal the profits that were discounted to calculate the initial PVFP balance.
- **Alternative 2.** Capitalize heaped renewal commissions and amortize the initial PVFP balance over FAS 97 estimated gross profits. In this scenario, estimated gross profits would equal the interest spreads less the *level portion of the commissions*.

TABLE 2

	Interest Earned (on NGL)	Interest Credited (on AV)	Commission	DAC Amortization	Income	FAS 97 EGPs	Income as Percentage of EGP
1	33	50	600	-624	6	20	32
2	111	103	50	-58	16	52	32
3	194	158	50	-40	27	85	32
4	284	216	50	-20	38	119	32
5	380	276	50	4	50	156	32
6	485	340	10	73	62	194	32
7	598	407	10	106	75	234	32
8	719	477	10	143	88	276	32
9	849	551	10	185	103	321	32
10	988	629	10	231	118	367	32

TABLE 3

	Account Value (BOY)	Interest Earned on AV	Interest Credited on AV	Total Commission	GAAP Profits
2	2,050	164	103	50	11
3	3,153	252	158	50	44
4	4,310	345	216	50	79
5	5,526	442	276	50	116
6	6,802	544	340	10	194
7	8,142	651	407	10	234
8	9,549	764	477	10	277
9	11,027	882	551	10	321
10	12,578	1,006	629	10	367
PV @ 12%					792

TABLE 4

	PVFP	Interest Earned (on NGL)	Interest Credited (on AV)	Commission	PVFP Amortization	Income	FAS 97 EGP	Income as Percentage of EGP*
@ Acq.	792							
2	846	101	103	50	-54	2	11	20
3	878	185	158	50	-32	9	44	20
4	885	275	216	50	-7	16	79	20
5	864	371	276	50	21	24	116	20
6	779	475	340	10	85	40	194	20
7	655	589	407	10	124	48	234	20
8	487	712	477	10	168	56	277	20
9	271	843	551	10	216	66	321	20
10	0	985	629	10	271	75	367	20

*These ratios are based on unrounded numbers, while the table displays rounded numbers.

Regardless of whether heaped renewal commissions are deferred or expensed in determining the PVFP amortization pattern, these commissions represent an expense to the acquiring company. Therefore, *total commissions* should be considered in the calculation of the initial PVFP.

PGAAP Alternative 1

The PVFP is amortized over the FAS 97 estimated gross profits, and renewal commissions are expensed as incurred. In this case, since no part of commissions is deferred, the full commission flows through EGPs and EGPs equal the interest spread less total commissions. The resulting PVFP amortization ratio is 80%. The

PVFP progression and income statement are shown in Table 4. Development of the PVFP is not shown in Table 4; each year's PVFP equals the prior year-end balance less 80% of the EGPs, accumulated at interest (in this illustration, at the earned rate) to the end of the year.

Despite its name, the PVFP balance at any valuation date after the acquisition date does *not* equal the present value of future profits discounted at a risk rate of return. This is because of differences between the interest rate used to amortize the PVFP and the risk rate of return used to calculate the initial PVFP balance. Note that in the income statement in Table 4, invested assets equal to the net GAAP liability (account value less PVFP) have been allocated to the line of business.

Table 4 shows profits that emerge as a level percentage of *FAS 97* estimated gross profits; however, earnings are extremely back-ended as a result of expensing total commissions. A similar illustration for a *FAS 60* product would show a back-ended profit pattern that is not a level percentage of premium, a pattern clearly inconsistent with the expected profit emergence under *FAS 60*.

After telling management and shareholders of the great profit that this acquisition would generate, what executive actuary would want to explain that earnings *will* emerge—just wait a few years? Perhaps there's a better way ...

PGAAP Alternative 2

The excess of the renewal commissions over the ultimate commissions is deferred as an addition to PVFP, and the PVFP is amortized over the *FAS 97* estimated gross profits (which in this case equal the interest spread less maintenance commissions). The PVFP development is shown in Table 5.

Note that under this approach the PVFP actually increases before it decreases. The growth buried into the PVFP schedule can be thought of as a DAC to reflect heaped renewal commissions paid after the acquisition date on acquired business.

The income statement for Alternative 2 is shown in Table 6.

Because renewal commissions are fully expensed under Alternative 1, that approach results in earnings that are lower than those generated under Alternative 2 for the first four years following the acquisition, and then higher thereafter. Despite the differences in the dollars of reported profits, profit emerges as a level percentage of *FAS 97* estimated gross profits under both alternatives. This profit emergence pattern is consistent with that under HGAAP, which is a desirable result. However, the fact that Alternative 2 produces such a back-ended profit pattern would often make it less desirable from management's perspective. Thus we return to the main question: "To defer or not to defer?"

TABLE 5

	Assumed Spread	Maintenance Commission	EPG	Defferal	PVFP
2	62	10	52	832*	856
3	95	10	85	40	897
4	129	10	119	40	913
5	166	10	156	40	900
6	204	10	194	0	811
7	244	10	234	0	682
8	286	10	276	0	507
9	331	10	321	0	282
10	377	10	367	0	0
PV			1,127	935	

Amortization Ratio: $935/1,127 = 0.83$

*The initial deferral equals the initial PVFP of \$792 plus the policy year two commission deferral of \$40.

TABLE 6

	PVFP	Interest Earned (on NGL)	Interest Credited (on AV)	Commission	PVFP Amortization	Income	FAS 97 EGP	Income as Percentage of EGP*
@ Acq.	792							
2	856	97	103	50	-64	9	52	17
3	897	181	158	50	-42	14	85	17
4	913	270	216	50	-16	20	119	17
5	900	366	276	50	13	27	156	17
6	811	472	340	10	89	33	194	17
7	682	586	407	10	129	40	234	17
8	507	709	477	10	175	47	276	17
9	282	842	551	10	225	55	321	17
10	0	984	629	10	282	63	367	17

GAAP Guidance on Deferrals

FAS 60 states that "commissions and other costs ... that are primarily related to insurance contracts issued or renewed during the period in which the costs are incurred shall be considered acquisition costs." Under this definition, renewal commissions in excess of ultimate levels are deferrable. *FAS 97* does not change the *FAS 60* definition of deferrable expenses, except to clarify that "acquisition costs that vary in a constant relationship to premiums ... shall be charged to expense in the period incurred." Thus, under *FAS 97*, the level portion of the renewal commission is not to be capitalized. *AICPA Practice Bulletin 8* confirms that under *FAS 97*, "ultimate level commissions ... are effectively charged to expense in the periods incurred." In summary, under *FAS 97*, consistent with *FAS 60*, the excess of the commissions paid in any year (first year or renewal) over the ultimate level is to be deferred.

Purchase accounting does not replace all existing GAAP guidance. Rather, PGAAP starts with the HGAAP methods prescribed for the product, changes assumptions as required for PGAAP, and then changes methods as required for PGAAP. Based on the GAAP guidance quoted above and because no change in deferral method is explicitly required under PGAAP, deferral of nonlevel first-year and maintenance commissions appears to be appropriate under PGAAP as well. Heaped renewal commissions are as much acquisition costs of the purchaser as they would have been of the original writer.

Implementation Considerations

As a practical implementation issue, if an approach is taken whereby renewal commissions are capitalized as part of PVFP (Alternative 2 above), total deferrable commissions will need to be allocated between DAC and PVFP, based on the policy issue date. Generally, this level of detail is not available, and an allocation method must be developed. To the extent that commissions are misallocated by issue year, the financial statement effect is likely to be small. The effect arises from the difference between the amortization ratio for new business DAC and the amortization ratio for PVFP.

However, if an approach is taken whereby no future commissions are deferred on acquired business (Alternative 1 above), the allocation becomes much more material, because a misallocation between commissions on pre- and post-acquisition business will change the total commissions capitalized.

Summary

This article presents an example of a "real-life" PGAAP situation and the resulting profit emergence under two alternative approaches. In forming a conclusion about the best PGAAP approach in a particular situation, the actuary should carefully review existing GAAP guidance and analyze the resulting projected profit pattern. For *FAS 60* business, profits should emerge in proportion to premiums (or in proportion to face amount in force for limited pay business). For *FAS*

97 business, profits should emerge in proportion to FAS 97 estimated gross profits. The approach selected should neither front-end nor back-end profits significantly. In the final analysis, the reasonableness of the expected profit pattern is the ultimate test of the appropriateness of a purchase accounting approach.

End Notes

1. See Howard Rosen's article. "Whither Goes PVP?" in the December 1994 issue of *The Financial Reporter*.

