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Purchase Accounting for Insurance Business Combination under China-GAAP from an Actuarial Perspective – Part II

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In Part I that was published in the December 2016 issue of *The Financial Reporter*, we discussed several theoretical topics regarding purchase accounting under China-GAAP. In Part II, we will discuss the following practical issues:

- Differences in product classification under China-GAAP and IFRS,
- Unbundling of insurance contracts,
- Allocation of acquisition expenses among components of the unbundled contracts,
- Relationship between residual margin (RM), best estimate liability (BEL) and risk adjustment (RA) due to assumption changes,
- Grouping of value of business acquired (VOBA) for amortization, and
- Shadow accounting

PRODUCT CLASSIFICATION UNDER CHINA-GAAP

Under China-GAAP, insurers are required to perform a test of significant insurance risk for all of their insurance policies upon sales and subsequent reporting periods. Such tests should be performed separately for base policies and riders. If an insurance or reinsurance policy passes the test, it should then be accounted for using accounting standards for insurance contracts. Otherwise, other applicable accounting standards should be applied.

To perform the test, the insurer must first determine whether the risk transferred by the policy is a pre-existing insurance risk with commercial substance. If the transferred risk is not an insurance risk, such contract cannot be considered as an insurance contract. Second, the insurer calculates an insurance risk ratio¹ for each non-annuity contract.

If the insurance risk ratio at one or more renewal years equals or exceeds 5 percent, the insurance risk is regarded as significant and the policy is qualified as an insurance contract under China-GAAP.

For annuity policies, longevity risks can be significant. Therefore, for practicality and simplicity purposes, policies that transfer longevity risk are usually categorized as insurance contracts.

For reinsurance policies, the test is slightly different from that for insurance policies. The ceding company first determines whether the transferred risk is a pre-existing insurance risk with commercial substance. Then, the insurer computes the reinsurance risk ratio.² If the ratio equals or exceeds 1 percent (not 5 percent as used for direct business), the reinsurance policy is qualified as a reinsurance contract under China-GAAP.

Even if a policy is considered as an insurance contract at inception, the insurer is required to continually monitor the policy's status at each subsequent valuation date. If warranted, the insurer may re-classify the policy as a non-insurance contract.

As indicated in one of the examples illustrated by China Insurance Regulatory Commission (CIRC), if the insurance company expects that most of the insureds would choose the annuitization option based on the guaranteed annuitization rate, the company is subject to longevity risk and the policies are considered insurance contracts.

If, based on emerging statistics and external interest rate environment, the company recognizes at a subsequent date that most insureds would not choose the annuitization option due to a low guaranteed annuitization rate, the insurance company may re-evaluate the significance of the longevity risk of the policies and consider them non-insurance policies.

PRODUCT CLASSIFICATION UNDER THE 2010 AND 2013 IFRS 4 PHASE II EXPOSURE DRAFT

There are minor differences between product classification guidance under China-GAAP and that defined in the 2010 and 2013 IFRS 4 Phase II exposure drafts ("2010 ED" and "2013 ED" respectively).³ Paragraphs B1–B22 of the 2010 ED provide guidance on the definition of an insurance contract by addressing items such as "uncertain future event," "payment in kind," "insurance risks and other risks." This guidance assists insurers to determine the commercial substances of a policy.

Paragraphs B23–B31 of the 2010 ED provide further guidance on the criteria to determine the significance of insurance risk. According to paragraph B24,

“Insurance risk is significant, if and only if, an insured event could cause an insurer to pay significant additional benefits in any scenario, excluding scenarios that lack commercial substance (i.e., have no discernible effect on the economics of the transaction). If significant additional benefits would be payable in scenarios that have commercial substance, the condition in previous sentence can be met even if the insured event is extremely unlikely or even if the expected (i.e., probability-weighted) present value of contingent cash flows is a small proportion of the expected present value of all the remaining cash flows from the insurance contract.”

Thus, under the 2010 ED, a policy can be considered as an insurance contract if the insurer can:

- a. Identify one extremely unlikely scenario which can cause the insurer to pay significant additional benefits, or
- b. Determine whether the ratio between (i) the expected present value of contingent cash flows; and (ii) the expected present value of all remaining cash flows is greater than a threshold percentage.⁴

Due to the differences in definitions of insurance contract, a policy recognized as an insurance contract under the 2010 ED may not be recognized as an insurance contract under China-GAAP or vice versa.

Paragraphs 32–33 of the 2010 ED specify that a contract that qualifies as an insurance contract shall remain an insurance contract until all rights and obligations are extinguished. As mentioned earlier, under China-GAAP, an insurer is required to continually monitor the policy’s status and may reclassify an insurance contract as a non-insurance contract, if warranted.

Due to these differences in product classifications, a company preparing China-GAAP for the first time due to purchase accounting should assess whether the product classification under its existing accounting policy is consistent with that under China-GAAP.

UNBUNDLING OF AN INSURANCE CONTRACT

Paragraphs 8–12 of the 2010 ED provides guidance that an insurer should unbundle an insurance contract into different components if the investment and the service components are not closely related to the contract’s insurance component. An investment component is considered to not be closely related to the insurance component if it reflects an account balance that meets the following conditions:



- a. The account balance is credited with an explicit return; and
- b. The crediting rate is based on the investment performance of the underlying investments such as a specific pool of investments for unit-linked contracts, a notional pool of investments for index-linked contracts or a general account pool of investment for universal life contracts.

Examples of unbundled components include embedded derivatives that can be separated from the host contract in accordance with IAS 39 as well as goods and services components that are not closely related to the insurance component.

Based on the comments from the industry regarding unbundling, paragraph 10 of the 2013 ED updates the unbundling guidance. An insurer should only separate an investment component from its host contract if the investment component is distinct. Paragraph 32(b) of the 2013 ED further indicates that if the lapse or termination of one component in a contract causes the lapse or termination of the other components, the insurer should apply the Insurance Standard to the whole contract (i.e., not unbundling). Under this guidance, a universal life contract probably should not be unbundled. For more information, please see the illustrative example in paragraph IE3 of the 2013 ED.

Paragraph 10(d) and BCA208 of the 2013 ED also prohibit insurers from separating components when it is not required.



China-GAAP guidance, on the other hand, requires an insurer to unbundle the contract into components if the insurance risk and the other risks can be separated and independently measured. If the components cannot be separated and the insurance risk is significant, the entire contract is considered as an insurance contract. If the insurance risk is not significant, it should not be recognized as an insurance contract.

The exact definition of “separable,” however, is not provided.

We studied market practice in China and it appears that most companies follow the guidance provided in paragraphs 8–12 of the 2010 ED. That is,

- Universal life, unit-linked contracts and other contracts which have an explicit account value are unbundled into separate investment and insurance component;
- Premiums, premium loads, contract charges and acquisition expenses are fully allocated to the investment component;
- Cost of insurance charges which are deducted from the account value are considered as cash inflows of the unbundled insurance component; and
- Whole life or participating policies which do not have explicit account value are not unbundled.

While we can debate which way is a better way to unbundle an insurance contract, the current market practice in China provides a head-up for companies preparing China-GAAP for the first time.

After a contract is unbundled into its investment and insurance components, the next step is to determine the BEL, RA and risk margin (RM) of the insurance component. For products which are priced with proper cost of insurance (COI) charges, the insurance component should be self-supporting. However, if the product is priced with low COI charges and the investment spread is used to subsidize the COI charges, the insurance component may become an onerous contract and require loss recognition even when the contract, as a whole, is profitable.

When such a situation happens, an insurer may consider combining the COI charges with other charges collected from the policy as cash inflows for the insurance component so that the present value of the combined charges is greater than the present value of cash outflows (e.g., death benefits).

For products which are priced with minimal contract charges or no COI charges, using the method mentioned above may still result in an onerous insurance component.

An insurer facing this issue may consider leveraging on the total assessment approach mentioned in the Statement of Position 03-1 under USGAAP for the guaranteed minimum death benefit (GMDB) of variable annuity contracts. Under the total assessment approach, the sum of the investment spread and other charges collected from the variable annuity contract is used as the revenue stream to reserve for the GMDB. For a universal life policy with low or no COI charges, the insurer may study the pricing document and identify the amount of interest spread which is priced to subsidize the COI charges. From an economic perspective, allocating an appropriate portion of investment spread as additional cash inflows for the insurance component to avoid loss recognition appears to be a viable solution. However, such practice is not common in China. Instead, companies would typically reprice the product with different product designs so that risks can be minimized.

ALLOCATION OF ACQUISITION EXPENSES

An aftermath of unbundling components of a policy (e.g., universal life policy) is the allocation of premiums, acquisition expenses, charges, etc. among the components. A common market practice in China is to allocate all premiums, acquisition expenses, and policy charges such as front-end load and administration charges to the investment component. The insurance component only receives charges (e.g., COI charge) from the investment component as cash inflows and pays the death benefits as cash outflows.

According to China-GAAP guidance on liabilities for non-insurance contracts, the liability of the unbundled investment component of a universal life policy is the account value less the unamortized net acquisition expense. The amortization is based on an effective interest rate method and the net acquisition expense is the acquisition expense at issue less the applicable initial policy charge such as initial premium load.

Normally, acquisition expense is greater than the initial policy charge such that the net acquisition expense is positive. If the policy charge is greater than the acquisition expense, the guidance does not specify whether the insurer can recognize the profit or capitalize it as an unearned revenue liability. As the insurer has yet to complete the earning process, the insurer may consider recognizing the negative net acquisition expense as unearned revenue liability.

In practice, many companies simply hold the account value as the liability and let the acquisition costs and policy charges flow through the P&L.

RESIDUAL MARGIN AND CHANGES IN BEL AND RA

In Part I of this article, we discussed two different ways to treat the RM at the time of acquisition. One possible way is to maintain the existing RM and define book value of liability as

the sum of BEL, RA and RM. In this case, both the actuarial reserve and the VOBA will be inflated by the RM.

An alternative is to set RM to zero so that the resulting VOBA is not inflated.

The market practices in measuring RM in subsequent valuation dates vary among companies. Some companies follow the guidance in the 2010 ED such that RM is determined at inception and is not adjusted subsequently. If there are any changes in BEL and RA in subsequent periods, the changes in BEL and RA due to assumption changes would flow through the income statement.

Some companies in China, on the other hand, do not follow this “locked-in” approach. Instead, they follow the guidance in paragraphs 29–32 of the 2013 ED where changes in BEL and RA in subsequent periods could be absorbed by changes in RM. For companies which define RM as zero in the initial PGAAP balance sheet, it does not necessarily mean that RM cannot be positive in subsequent measurement. An acquirer must define clearly in its accounting policy whether it follows the guidance in the 2010 ED or the 2013 ED on RM. That is, whether the changes in BEL and RA due to assumption changes should be reflected in the income statement or absorbed by RM.

GROUPING OF VOBA FOR AMORTIZATION

If the acquired company has many blocks of business, there could be many VOBAs for amortization. If the definition of the unit of account is at a lower level, the number of VOBAs can be in the thousands and it would be a practical challenge for companies to amortize a large number of VOBAs and monitor their reasonableness.

For blocks with immaterial VOBA, the acquirer may consider assigning their VOBA to other major blocks of business for practical reasons as long as the inclusion of these small VOBAs would not materially affect the profit emergence of the bigger block.

RELATIONSHIP BETWEEN DISCOUNT RATE AND SHADOW RESERVE

As all assets and liabilities are marked to market at the acquisition date, the book values of the invested assets will be replaced by the market value at the acquisition date and the previous book yields will also be replaced. The change in book yield has important implication on the reserve of par business because the discount rate is based on the company’s projected future earned rates and reinvestment rate.

DISCOUNT RATE FOR PARTICIPATING BUSINESS

China-GAAP literature is silent on whether the discount rates for par business shall be based on the book yield or the market

yield of the supporting assets. From a matching of investment income and interest expense perspective, it would make sense that the discount rates should be consistent with the yields on supporting assets based on their asset classification. That is, if all of the supporting assets are classified as held-to-maturity (HTM), the discount rates should be based on their book yields.

Due to the lack of clear guidance, if the supporting assets are a mixture of HTM and available-for-sale (AFS) assets, it is not clear whether the company should simply use the book yields of the supporting assets regardless of their classification or a blend of book yields and market yields. It would seem to make sense to discount the future benefits using the blended yield rates.

If the discount rates are based on blended yields, any unrealized capital gain or loss (URGL) would affect the market yields of AFS assets and the resulting discount rates. The change in reserve due to the change in market yield would partially offset the change in market value of AFS assets on other comprehensive income (OCI) and equity.

If the discount rate is based on book yields even when some of the supporting assets are classified as AFS, the URGL of the AFS assets would then have a larger impact on the equity as the change in market yields would not affect the discount rate and the actuarial reserve.

NON-PARTICIPATING BUSINESS

The discount rate for non-participating business (such as term insurance or the insurance component of universal life) is based on the 750 days moving average of Chinese national debt yield and liquidity premium. Thus, it is independent of the yield rates of the supporting assets.

If some of the supporting assets are AFS assets, the URGL would directly affect the OCI and the equity.

UNREALIZED CAPITAL GAIN/LOSS AND SHADOW ACCOUNTING

Shadow accounting is a common concept under IFRS to mitigate the impact of URGL on income and equity. Currently, there is no shadow accounting guidance under China-GAAP.

For participating business, if the URGL is recognized and the amount is expected to be shared⁵ between policyholders and shareholders, a company may consider setting up a shadow reserve adjustment (e.g., 80 percent of the URGL) to account for future dividend changes due to the URGL.

For non-participating policies such as term insurance, the URGL would not be shared with policyholder in terms of dividends. As there is no DAC under China-GAAP, the shadow DAC approach under US GAAP is not applicable. Thus,

shadow accounting may not apply for non-par business and URGL may directly affect the OCI and the equity.

CONCLUSION

We are only at the initial stage of discussing issues related to preparing PGAAP under China-GAAP. The guidance from the China Insurance Regulatory Commission (CIRC) will continue to evolve and become clearer with more actual cases. In addition, CIRC may incorporate the updated provisions of IFRS 17 into the future China-GAAP. Refinements to the actuarial processes would be inevitable.

This article (Part I and II) is intended to initiate discussions among actuaries rather than to provide strict answers. Practitioners are encouraged to further discuss this subject in future professional publications and conferences.

Disclaimer: The views reflected in this article are the views of the author and do not necessarily reflect the views of the global EY organisation or its member firms. ■



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ENDNOTES

- Insurance risk ratio = $\left(\frac{\text{Benefit paid by the insurer should the insured event occur}}{\text{Benefit paid by the insurer should the insured event not occur}} - 1 \right) \times 100\%$.
The denominator refers to the surrender benefit or maturity benefit. For non-life contracts, it refers to surrender benefit or the amount paid by the insurer when the contract is terminated.
- Insurance risk ratio for reinsurance policy = $\left(\frac{\sum \text{Present value of the losses suffered by the reinsurer under a net loss scenario} \times \text{probability of the net loss scenario}}{\text{Present value of reinsurance premium received by the reinsurer}} \right) \times 100\%$
- This article focuses on the 2010 and 2013 exposure drafts since IFRS 17 has not yet been officially adopted by CIRC.
- The threshold percentage should be based on the insurer's internal accounting policy.
- The sharing percentage should be based on the policyholder reasonable expectation.