



THE IFRS 17 SUPREMACY

BY **SERVAAS HOUBEN**

With the introduction of a new accounting standard, the search for KPIs to measure success of insurance companies has begun. Where under IFRS 4 the return on equity or gross written premium measures were common, under IFRS 17 the concept of current and future equity (CSM, RA) has been introduced and premium income has lost its central presence in disclosures and financial reporting. Although the search for the best KPIs is still ongoing and will change over time based on user experience, I will give an insight on why KPIs play a central role within the finance industry, what the major changes in reporting and KPIs has been from IFRS 4 to IFRS 17, and what logical choices for KPIs could be under IFRS 17 depending on the nature of the insurance business.

THE ROLE OF KPIS IN FINANCIAL STATEMENT ANALYSIS

Financial statement analysis plays such a central role in the CFA program that highest weights in levels 1 and 2 are assigned to financial reporting and analysis. Financial statement analysis allows an analyst to convert data into financial metrics which can be used for decision making and to assess the company's performance and trend in performance. It is common to use ratios to express company performance, as it removes company size as a factor when comparing companies and enable easier comparison >

over time (trends). Although the use of ratios has its pitfalls (judgment, different accounting methods, consistency of underlying data over time) they are well embedded in the financial industry. Most common categories of financial ratios are:

- **Activity:** such as asset utilization ratios, or operational efficiency, which measure how efficiently the company utilizes assets such as inventory/receivables/payables/asset turnover ratios.
- **Liquidity:** measuring the ability to meet short term obligations, such as current, quick and cash ratios.
- **Solvency:** measuring the ability to meet long term obligations, therefore requiring more insight in the financial structure of the company such as debt level. Common ratios are debt-to assets/capital/equity ratios, or interest coverage.
- **Profitability:** measuring the ability to generate profit and hence a reflection of the company in the market and the quality of management. Return on assets/equity (ROA/ROE), and profit margin are famous examples.
- **Valuation:** measuring the quantity of an asset or flow such as price to earnings or earnings per share.

The choice of financial ratio to focus on depends on the type of industry: e.g. some industries like banks are more vulnerable to short term liquidity challenges than pension funds. Stock traded companies are more sensitive to profitability and valuation ratios, while non-traded companies like pension funds focus more on longer term goals and thus tend to use solvency ratios. Even within an industry different ratios might be applicable: non-life insurance companies tend to have short term obligations while life insurance companies tend to have long term obligations.

Besides the 'pure' five ratios mentioned earlier, there are examples of ratios using a decomposition of another ratio into sub-elements with the goal of providing additional insight. The DuPont analysis is such a decomposition of the ROE and helps to explain the different components affecting ROE. An example of ROE decomposition is to rewrite ROE as ROA times leverage which then can be rewritten as:

$$\frac{\text{Net income}}{\text{Shareholders' equity}} = \frac{\text{Net income}}{\text{EBT}} \times \frac{\text{EBT}}{\text{EBIT}} \times \frac{\text{EBIT}}{\text{Revenue}} \times \frac{\text{Revenue}}{\text{Average total assets}} \times \frac{\text{Average total assets}}{\text{Shareholders' equity}} \quad \text{Equation 1}$$

Which is interpreted as

$$\text{ROE} = \text{Tax burden} \times \text{Interest burden} \times \text{EBIT margin} \times \text{Total asset turnover} \times \text{Leverage}$$

As IFRS (17) is an accounting framework which main aim is to measure the level of profitability, applying one of the profitability ratios in the context of IFRS 17 seems to most sensible. >

KPIS USED UNDER IFRS 4

Depending on the status of the insurance company (publicly traded or not) in the past the following KPIs were used under IFRS4:

- **ROE:** a general metric which can be used across insurance companies (primary vs reinsurance, life/non-life/health). As this metric is also used for other industries, it is easy to understand for analysts. Possible drawbacks could be that due to heavy regulations in insurance, comparing an insurance company's ROE with other industries might not provide insights.
- **Combined ratio or claims ratio** (mainly non-life): this ratio is more insurance specific and thus can be less easily compared with other sectors. Especially with business with short duration (and hence no significant investment results) a combined ratio reflects the efficiency of management (selection of risks, pricing and efficiency of operations).
- **New business strain:** showing the tradeoff of upfront expenses (commissions, reserves) compared to profits over time. This metric reflects the relative ease with which new business can be written.
- **Premium volume:** giving insights in future market share, possibilities for economies of scale etc.
- **Technical component analysis:** similar to Dupont analysis where the overall (technical) result is split up in underlying factors like actuarial assumptions and expenses to provide more insight in what components contribute most to profit.

Like with the financial ratios depending on the type of business, and the audience, different metrics are most suitable. However the ROE has the main benefit of being used widespread outside of the insurance industry and therefore seems the most logical candidate to measure financial success.

CHANGES IN IFRS 17 COMPARED TO IFRS 4

IFRS 17 introduces some fundamental new concepts which differ from IFRS4. Besides the more market-based approach relying on current assumptions, and the preference for market based valuation, when possible, the concept of CSM is introduced which reflects the future profit. Instead of taking a day 1 gain or loss, profit is released over time when coverage is provided in line with IFRS 15 revenue recognition. Furthermore the Risk Adjustment (comparable to Solvency II Risk Margin) is introduced providing an additional buffer for non-financial cash flow uncertainty. As CSM and RA are released in the future, they are not part of current equity however excluding them altogether from a profitability assessment will underestimate the profitability of the company. Lastly CSM and RA tend to be pretax balance sheet items, while equity is post tax further complicating matters. >

WHICH KPIS SEEM LOGICAL CHOICES UNDER IFRS 17

As premium volume does not play such an important role in IFRS 17, and instead the focus has switched more towards future profits (CSM) other metrics than premium income seem a more logical KPI to use. The following measures related to ROE and therefore might be logical choices, where net income is the P&L impact and the items with * are the optional elements in the equation:

$$\text{IFRS 17 ROE} = \frac{\text{Net income}}{\text{Shareholders' equity} + [(\text{CSM} + \text{RA})^* \times \text{TaxAdjustmentFactor}^*] \times \text{FutureProfitAdjustmentfactor}^*} \quad \text{Equation 2}$$

- **Shareholders' equity:** this would be a least conservative approach and understatement of future profits included in CSM and RA resulting in a high ROE%.
- **Shareholders' equity + other elements like CSM and RA:** a more realistic approach on future profitability however more complicated approach:
 - Tax effects: as equity is post tax while CSM and RA are pre tax, a tax adjustment would be required.
 - With or without prudence margin: as there is uncertainty around CSM and RA, taking the full amount might be an overstatement of profitability.
 - Current or future equity: for the denominator one can either consider only the current equity (which reflects current investment) or the future equity including CSM and RA. The latter might be a more realistic reflection of profitability as part of the equity under IFRS 4 tends to be allocated to CSM under IFRS 17.
- Circular reference: when CSM and RA are both include in the numerator (P&L release) and denominator (equity + CSM + RA) there is a circular reference with a higher CSM resulting in a higher CSM release hence not showing the full effect of future profits.
- Understanding of coverage units essential and development of locked in rates.

While CSM seems to be a good indication of future profits for life business, it might underestimate profitability under non-life business especially with short term contracts. >

Lastly due to changes in past and future/current business levels of profitability due to higher inflation and interest rates, it could make sense to perform ROE calculations on different cohorts of the business.

Like the ROE decomposition under DuPont, it seems to make sense to apply decomposition of the net income over equity ratio in an insurance profitability context:

$$\text{IFRS 17 ROE} = \frac{\text{Net income}}{\text{Shareholders' equity}} = \frac{\text{Net income}}{\text{CSM} + \text{RA}} \times \frac{\text{CSM} + \text{RA}}{\text{Equity}} \quad \text{Equation 3}$$

Where the first component expresses the current period income over future income, and the second component measures future profitability over invested capital. Like with DuPont additional elements on tax, leverage or interest expenses can be added.

CONCLUSION

Like in other industries, also in insurance metrics play a key role for analysts enabling them to compare different companies. Similar like with other industries, a ratio by itself might not explain the full story and hence the analyst needs to be aware of company specific or industry circumstances before being able to compare insurance company's results with each other or with companies from other industries: as insurance (like banking) is heavily regulated, this leaves less room for companies for (excessive) risk taking, hence affecting the level of ratios. IFRS 17 CSM has similarities with Embedded Value (EV) metrics used in the past, and might result in a revival of interest for EV

This article shows the challenges for deriving an insurance specific KPI which heavily depends on sector and time specific circumstances. To ensure the diversity within the insurance sector is properly reflected in KPIs, a blend of optimistic and pessimistic KPIs might provide the most insight in the level of profitability of the company. Decomposition of return in equity as under DuPont will provide better insights in the underlying elements of profitability and giving management insight in what levers can be pulled. <



DRS. S. HOUBEN AAG FIA
CFA FRM works as Manager
Actuarial at Ergo Insurance,
Brussels, Belgium.
