Economic Value Management (Online Only)

Summary of significant EVM principles

Economic Value Management (EVM) is Swiss Re's proprietary integrated economic valuation and steering framework, which consistently measures economic performance across all businesses. In addition, the EVM balance sheet provides the basis for determining available capital under the Swiss Solvency Test (SST). EVM best estimate cash flow information also forms the basis for the calculation of Solvency II technical provisions.

The EVM framework differs significantly from US GAAP, which is the basis on which Swiss Re prepares its consolidated financial statements. Swiss Re's EVM income statement (and its line items) should not be viewed as a substitute for the income statement (and its line items) in Swiss Re's US GAAP consolidated financial statements and Swiss Re's EVM economic net worth (ENW) should not be viewed as a substitute for shareholders' equity as reported in Swiss Re's US GAAP consolidated balance sheet. EVM results may be subject to significant volatility as assets and liabilities are measured on a market-consistent basis. Nonetheless, Swiss Re believes that EVM provides meaningful additional measures to evaluate its business. As it is a proprietary framework, Swiss Re may change its EVM methodology from time to time.

Nature of operations

The Swiss Re Group, which is headquartered in Zurich, Switzerland, comprises Swiss Re Ltd (the parent company) and its subsidiaries (collectively, the "Swiss Re Group" or the "Group"). The Swiss Re Group is a wholesale provider of reinsurance, insurance and other insurance-based forms of risk transfer. Working through brokers and a network of offices around the globe, the Group serves a client base consisting of insurance companies, mid-to-large-sized corporations and public-sector clients.

Basis of presentation

The EVM financial information has been prepared in accordance with the Group's EVM principles. All significant intra-group transactions and balances have been eliminated on consolidation.

All individual amounts in tables and graphs are rounded independently. Therefore, the rounded individual amounts may not add up to the rounded totals. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts.

Principles of consolidation

The EVM financial information follows the same consolidation principles as used in the preparation of the Group's consolidated US GAAP financial statements, except for holdings with non-controlling interests to which proportionate consolidation is applied to reflect Swiss Re's economic share.

Use of estimates

The preparation of EVM financial information requires management to make significant estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. The valuation of assets and liabilities reflects best estimates of underlying cash flows (eg premiums, claims, commissions, expenses, etc) using models and taking into consideration all relevant information available at the balance sheet date. In line with other valuation methods based on projections of future cash flows, EVM involves significant judgement when establishing assumptions to be used. The Group actively and carefully reviews assumptions, selecting those which are considered appropriate and seeking consistency among business activities. Valuations are updated at each balance sheet date as experience develops and more information becomes available. In-force business assets and liabilities include estimates for premiums as well as claims and benefit payments not received from ceding companies at the balance sheet date. In addition, the Group has certain assets and liabilities for which liquid market prices do not exist. These estimates are determined on a market-consistent basis using all relevant information available at the time of valuation. Actual results, however, could differ significantly from these estimates.

Foreign currency translation

Assets and liabilities denominated in foreign currencies are translated to the reporting currency at closing exchange rates. Revenues and expenses denominated in foreign currencies are translated to the reporting currency at average exchange rates for the reporting year. Foreign currency translation gains and losses are recognised directly in ENW with no impact on the EVM income statement.

Closed book principle

EVM excludes the recognition of all potential future new business activities, including future renewals. EVM recognises all profits and losses resulting from expected cash flows from contractual rights and obligations at inception or the effective date of a business transaction. Acquisitions do not result in the recording of goodwill or other intangible assets. Changes to previous assumptions and estimates are recognised as they occur. The closed book principle does not imply that EVM is a run-off reporting framework. Capital costs and expenses are projected on a going-concern basis, reflecting diversification benefits and economies of scale.

Valuation of assets and liabilities

All traded assets and liabilities are marked to market, based on quoted prices in active markets or observable inputs. Non-traded assets and liabilities are valued on a market-consistent basis. The Group's insurance liabilities are valued on a market-consistent basis by replicating future best estimate expected cash flows with liquid financial market instruments. As the majority of the Group's insurance liabilities do not contain embedded financial market risks other than interest rate risk, the market-consistent value of liabilities is determined by discounting estimated future cash flows using prevailing risk-free interest rates. If insurance liabilities include embedded options or guarantees (eg variable annuities or interest sensitive life business), they are valued on a market-consistent basis using stochastic models and other appropriate valuation techniques.

In-force business assets and liabilities

In-force business assets are assets associated with re/insurance contracts and include estimated future premiums and other expected cash inflows related to those contracts. They are carried at market-consistent values as described above.

In-force business liabilities are liabilities associated with re/insurance contracts and include best estimate reserves for expected claims, commissions and expenses. They are carried at market-consistent values as described above.

Retrocession assets and liabilities

Retrocessions are carried at market-consistent values in line with the methods applied to inward business.

A market-consistent allowance for counterparty credit risk is applied to uncollateralised external net retrocession assets.

Investments

All investments are carried at fair value. For non-traded assets, fair values are determined using a mark-to-model approach or other market-consistent techniques.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, short-term deposits, certain short-term investments in money market funds and highly liquid debt instruments with a remaining maturity at the date of acquisition of three months or less.

Tax assets and liabilities

The EVM valuation of tax assets and liabilities is determined in two steps. In step one, the portion of total EVM tax expense relevant for business steering and performance measurement is determined by applying standard tax rates to pre-tax results driven by the respective EVM cash flows. This portion of the total EVM tax expense is recognised in EVM profit. In step two, the total EVM tax expense is determined as the sum of (a) the change in US GAAP tax assets and liabilities and (b) the change in deferred tax assets and liabilities for temporary balance sheet valuation differences between US GAAP and EVM. The difference between the total EVM tax expense (step two) and the portion of the total EVM tax expense recognised in EVM profit (step one) is recognised in total contribution to ENW and presented in a separate line below EVM profit as 'Additional taxes'.

Other assets

Other assets include derivative financial instrument assets, receivables related to investing activities, real estate for own use, property, plant and equipment, accrued income, prepaid assets and the positive value of acquisitions and disposals signed but not yet closed. Real estate for own use is carried at fair value.

Other liabilities

Other liabilities include derivative financial instrument liabilities, payables related to investing activities, provisions for employee incentive plans, pension and other post-retirement benefits, a provision for estimated future overhead expenses and the negative value of acquisitions and disposals signed but not yet closed.

Debt

Swiss Re's external debt, including hybrid instruments, is carried at fair value. Where available, market prices are used to determine the fair value of debt. Debt that is not publicly traded is valued using market-consistent valuation techniques, which take into account, where applicable, the impact of own credit risk. In EVM, all hybrid debt instruments, including convertible instruments, are treated as liabilities.

The line item 'Cost of debt' in the EVM income statement includes the impact of changes in Swiss Re's credit spreads, the unwind of the discount attributable to Swiss Re's credit spreads, letter of credit fees and the current year costs of other forms of leverage. The impact of changes in risk-free interest rates and the unwind of the discount attributable to risk-free interest rates are included in the benchmark investment result.

Provision for capital costs

Frictional capital costs provide compensation to shareholders for agency costs, costs for potential financial distress and regulatory (illiquidity) costs. Frictional capital costs include risk capital costs and funding costs. Risk capital costs are charged at 4.5% of eligible economic capital which consists of ENW and eligible hybrid debt. Funding costs are charged or credited at the legal entity level depending on the liquidity the respective legal entity uses or generates. In addition, the provision for capital costs includes an allowance for double taxation on the risk-free return on capital allocated to underwriting activities.

Economic net worth

Economic net worth (ENW) is defined as the difference between the market-consistent value of assets and liabilities. ENW is an economic measure of shareholders' equity and the starting point in determining available capital under the SST.

Premiums and fees

Premiums and fees in the EVM income statement represent the present value of all estimated future premiums and fees on contracts written during the year. Changes in premium estimates on contracts written in prior years are reflected in previous years' business profit, along with changes in other underwriting cash flows relating to previous years.

Gross premiums and fees represent premiums and fees before external retrocessions and include gross premiums and fees from assumed intra-group transactions between the segments of the Group.

Claims and benefits
Claims and benefits in the EVM income statement represent the present value of all estimated future claims and benefits on contracts written during the year. Changes in estimates of claims and benefits payable on contracts written in prior years are reflected in previous years' business profit, along with changes in other underwriting cash flows relating to previous years.

For example, many property and casualty contracts written in the previous year cover losses in the current year (eg natural catastrophes) that are included in previous years' business profit.

Gross underwriting result – new business
The gross underwriting result from new business is defined as present value of new business underwriting cash flows (eg premiums, claims, commissions, etc) before internal expenses, taxes and capital costs. New business is defined as business that incepted in the current reporting year. In determining new business profit/loss, all cash flows resulting from new reinsurance and insurance contracts that incepted in the current reporting year are recognised at inception on a present value basis. Embedded financial options and guarantees are valued on a market-consistent basis.

Net underwriting result – new business
The net underwriting result from new business is defined as the gross underwriting result from new business net of the present value of internal expenses allocated to new business but before taxes and capital costs.

EVM profit – previous years' business
The underwriting result from previous years' business represents the present value of all changes in estimated cash flows on reinsurance and insurance contracts incepting in prior reporting years. These changes in cash flows reflect changes in best estimates as they occur. In addition, many contracts written in prior years have a policy term that extends into the current year (eg contracts incepting on 1 April for a 12-month policy term). Therefore, the impact of insurance events occurring in the current reporting year can be included in the result of previous years' business.

Mark-to-market investment result
Defined as the total return of Swiss Re's investments including any changes in fair value. For assets traded in active markets, the fair value equals the market value at the valuation date. The mark-to-market investment result excludes any investment income from cedents, unit-linked and with-profit business and certain loans.

Benchmark investment result
Includes changes in the economic value of liabilities as a result of movements in risk-free discount rates, the passage of time, changes in credit spreads, changes in equity prices or changes in the economic value of embedded options and guarantees, and the risk-free return on ENW.

Gross outperformance
Defined as the difference between the mark-to-market investment result and the benchmark investment result.

Net outperformance
Defined as the gross outperformance after deducting the actual costs incurred in managing the actual investment portfolio in excess of the internal fee paid by underwriting for the purchase and maintenance of the investment portfolio replicating the best-estimate liability and backing the associated capital requirements.

EVM profit and total contribution to ENW
EVM profit is a risk-adjusted measure of performance that can be compared across all business activities. Total contribution to ENW is the total return generated for shareholders and includes, in addition to EVM profit, cost of debt, the release of current year capital costs and additional taxes. Total contribution to ENW is therefore not a risk-adjusted performance measure.

EVM profit consists of profit from underwriting activities and profit from investment activities. The profit from underwriting activities in turn segregates results from new business and previous years' business. New business is defined as business with an inception date within the current reporting year. For property and casualty business, performance resulting from contracts written or renewed within the reporting year is recognised as new business. This also applies to multi-year transactions. For life and health business, new business includes new individual business cessions in the year, renewals of and additions to existing group schemes, new group schemes, new Life Capital blocks and new cessions on existing blocks still open to new business and renewals of business that is subject to active annual renewal. Previous years' business results reflect the impact of changes in cash flow projections on contracts incepting in previous accounting periods.

The result from investment activities reflects the extent to which our investment management business has outperformed/underperformed the liability-based benchmark returns on a risk-adjusted basis.

EVM capital
EVM capital is the capital required to support uncertainty related to estimated cash flows arising from existing underwriting and investment activities.

Profit margin
The profit margin is calculated for new business, previous years' business and investment activities. The new business profit margin is the ratio of new business profit/loss to EVM capital allocated to new business over the lifetime of the business. The previous years' business profit margin is the ratio of previous years' business profit/loss to EVM capital allocated to previous years' business in the current year. Investment profit margin is the ratio of investment profit/loss to EVM capital allocated to investment activities in the current year.

Performance separation between underwriting and investment activities
EVM values and discloses underwriting and investment activities separately. Underwriting activities create value by writing insurance contracts at a higher price than their economic production costs including the cost of taking risk (capital costs). The performance of investment activities is assessed on a risk-adjusted basis. This enables consistent comparison of underwriting and investment activities.

Performance measurement after capital costs
EVM explicitly recognises opportunity costs for shareholder capital. Capital charges cover the base cost of capital and frictional capital costs. The base cost of capital consists of the risk-free return on ENW and market risk premiums. Market risk premiums provide a market-derived estimate of the premium required by investors for taking systematic financial market risk. Market risk premiums are charged to EVM profit as part of the capital costs to assess performance on a risk-adjusted basis. The majority of the Group's market risk premiums stem from market risk embedded in the investment portfolio.

Information on business segments
The definition of business segments for EVM reporting is aligned with the Group's US GAAP business segment reporting. The Group presents four core operating business segments: Property & Casualty Reinsurance, Life & Health Reinsurance, Corporate Solutions and Life Capital. The presentation of each segment's balance sheet is closely aligned to the segment legal entity structure. The assignment of assets and liabilities for entities that span more than one segment is determined by considering local statutory requirements, legal and other constraints, the economic view of duration and currency requirements of the business written and the capacity of the segments to absorb risks. Items not allocated to the business segments are included in the "Group items" column, which encompasses Swiss Re Ltd, the Group's ultimate parent company, Principal Investments and certain Treasury units and reinsurance and insurance business in run-off.

Segment information is presented net of external and internal retrocession and other intra-group arrangements. The Group total is obtained after elimination of intra-group transactions in the "Consolidation" column. This includes significant intra-group reinsurance arrangements, recharge of trademark licence fees and inter-segmental funding.

Change in EVM methodology
As of 1 January 2020, the Group decided to adopt an intensity-based approach for modelling EVM capital of underwriting activities. This approach allows the EVM capital amounts to vary over the cycle according to changes in business volumes and interest rates. It replaces the previous approach in which the total amount of EVM capital was fixed and usually kept constant over the EVM performance cycle. Intensities are calibrated at the start of the performance cycle based on the internal risk model, with the option to update them within the cycle in case of significant changes in the business mix or risk model changes. This change in EVM methodology reduced the Group's 2020 ENW by USD 492 million. The transition impact of the change in EVM methodology was recorded as an adjustment to the opening balance of 2020 ENW.

.