

Discuss the two distinctions within the assets held by insurers on the balance sheet

“Cash and invested assets” vs. “non-invested assets” as well as “admitted” vs. “non-admitted” assets. Cash and invested assets are shown in Rows 1-12 and include items that could be readily sold to meet liabilities. Non-invested assets are less liquid and shown in Rows 13-25. This distinction is made due to SAP’s focus on solvency. Non-admitted assets are not recognized by regulators in evaluating the solvency of insurers under SAP. Non-admitted assets are not readily convertible to meet liabilities now or in the future and therefore should not be considered in evaluating solvency.

Briefly discuss the most noteworthy classes of assets held by insurers

Bonds (Line 1) are securities that pay one or more future interest payments, along with the face value at maturity.
Stocks (Line 2) are securities that represent ownership in a company but are subordinate to the claims of bondholders and creditors.

Real estate (Line 4) is separated into three categories in the balance sheet:

Cash, cash equivalents and short-term investments (Line 5) includes items that are nearly immediately convertible into cash.

Uncollected and deferred premiums and agents' balances (Lines 15.1 and 15.2) represent premiums that have been written but have not yet been received.

Amounts recoverable from reinsurers (Line 16.1) represent amounts expected to be received from reinsurers on loss and LAE that has been paid out.

Net deferred tax assets (DTA) (Line 18.2) represent expected future tax benefits, related to amounts previously recorded, that are not expected to be reflected in the tax filings as of the reporting.

Receivables from parent, subsidiaries and affiliates (Line 23) represent receivable balances for services or resources shared between affiliates or from a parent company.

Briefly discuss the most noteworthy classes of liabilities held by insurers

Loss and loss adjustment expenses (Lines 1 and 3) represent management's best estimate on loss and LAE reserves, net of reinsurance (including assumed reinsurance, less ceded reinsurance).

Reinsurance payable on paid losses and loss adjustment expenses (Line 2) represents assumed reinsurance payable to the insured for paid loss and LAE.

Other expenses (excluding taxes, licenses, and fees) (Line 5) is primarily made up of incurred but unpaid general, administrative, and investment expenses.

Unearned premiums (Line 9) represent the liabilities related to the unexpired portion of premium on all policies in-force.

Ceded reinsurance premiums payable (net of ceding commissions) (Line 12) represent premium owed to reinsurers for reinsurance ceded.

Funds held by company under reinsurance treaties (Line 13) represent the funds held by a ceding company as collateral for future reinsurance recoverables from a reinsurer, including ceded premiums that were payable but instead held as collateral under the terms of the contract.

Provision for reinsurance (Line 16) is a statutory accounting liability established for reinsurance recoverables that may not be collectable.

Briefly discuss the most noteworthy items recorded under the surplus items in Rows 29-37 of the Liabilities, Surplus and Other Funds exhibit (p. 3)

Common capital stock (Line 30) represents the par value of the company's common stock issued and outstanding (\$0 for mutual companies).

Gross paid in and contributed surplus (Line 34) represents amounts received through the sale of company stock in excess of the par value (will again be \$0 for mutual insurers).

Unassigned funds (surplus) (Line 35) represents surplus that has been attained over time through retained earnings.

List the three sources of income presented in the income statement

The income statement portion of the exhibit (Lines 1-20) is broken down into three sources of income: underwriting income (Lines 1-8), investment income (Lines 9-11), and other income (Lines 12-15). Each of the three sources of income are presented before policyholder dividends and federal and foreign income taxes, which are shown as separate line items on Lines 17 and 19, respectively.

Discuss the source of income most relevant to actuaries and its main components

Underwriting income is generally the most important and relevant income source to actuaries.

Underwriting income (Line 8) is earned premium (Line 1) plus net income from protected cells (Line 7) minus loss and LAE incurred (Lines 2-3), other underwriting expenses incurred (Line 4), and write-ins for underwriting deductions (Line 5)—all during the time period covered by the financial statements.

Incurred loss and LAE (Lines 2-3) during the period is equal to the ultimate from claims incurred in the current period plus the change in ultimate estimates on prior years. Equivalently, it is equal to the payments during the period (from all years) plus the change in unpaid (from all years)

The other underwriting expenses incurred (Line 4) include all such expenses incurred during the current period, regardless of if they have been paid or not (i.e., their ultimate amount).

Discuss how investment income comes about and its components

Investment income arises as insurers generally receive premium payments at the beginning of the policy, while losses and expenses are often not paid out until far into the future—these future losses and expenses will be reserved for, but the dollars backing them up will be invested and earn income until paid out.

Net investment income (Line 11) is the sum of net investment income earned (Line 9) and net realized capital gains (Line 10). Net investment income earned (Line 9) is from interest and dividends earned on invested assets during the year (i.e., income earned during the period, even if paid/received after the period)—this amount is net of investment expenses and other costs, but gross of federal income taxes. Net realized capital gains (Line 10) are the result of selling an asset for more (or less) than the amortized original cost and presented after capital gains taxes (changes in asset values of held assets are not realized, but rather unrealized and are recorded in the capital and surplus account).

Discuss the components of investment income earned from bonds

Net investment income earned (Line 9) from bonds is comprised of the four following components:

- 1) Interest received during the year: We start with the interest received during the year, but what we record in total is the interest earned during the year, so we must adjust this value by items 2-3 below to put it on an accrual basis (meaning it reflects what is earned, rather than when the cash is received).
- 2) Change in interest due and accrued: This adjusts for differences between interest received and interest accrued during the period.
- 3) Interest paid for accrued interest on dividends: When a bond is purchased between coupon payments, the buyer must pay the seller the portion of the coupon earned while they owned the bond.
- 4) Current year's amortization/accretion: Bond purchase prices will generally be different than the face value of the bond due to differences between market interest rates and the coupon rate of the bond. The bond discount or premium will be realized as either positive (if bought at a discount) or negative (if bought at a premium) investment income over the life of the bond.

Discuss investment income earned from stocks

Net investment income earned (Line 9) from stocks is simply the dividends received during the year plus the change in accrual for dividends paid but not received (since recorded on an accrual basis). After purchase, common stocks of unaffiliated companies are recorded at fair value. Changes in fair value are recorded as unrealized gains prior to disposal—when sold, the difference between the purchase price and sale proceeds will become a realized capital gain (or loss) in Line 10. Similarly, changes in preferred stock values are unrealized until disposed of, at which time the difference between recorded value and sales proceeds becomes a realized capital gain (or loss) in Line 10.

Discuss the components of net realized capital gains from bonds

Net realized capital gains (Line 10) from bonds is comprised of the three following components:

- 1) Realized gain (loss) on sale or maturity: Recall that bonds are recorded at amortized cost for those rated NAIC 1-2 and the lower of amortized cost and fair value for those rated NAIC 3-6. Amortized cost and fair value converge to the par value as the bond matures, so if held until maturity there will be no realized capital gain or loss on the bond. A gain or loss can be realized if the bond is sold for a price different than the recorded value (e.g., selling a bond rated NAIC 1-2 prior to maturity).
- 2) Foreign exchange gain (loss) on disposal: Bonds denominated in another currency will be affected by changes in exchange rates—these changes are reflected in the adjusted carried value but are unrealized until the bond is sold or matures.
- 3) Other than temporary impairments recognized: Impairment occurs when a company determines they are unlikely to receive amounts due—if this impairment is not just temporary, it should be recognized as a realized loss.

Discuss other income and its components

The final source of income is other income (Line 15, which is the sum of Lines 12-14). The first component of other income is the net gain or loss from agents' balances charged off (Line 12)—this is any amount written off for uncollectable agents' balances (or conversely, amounts previously written off but now recovered). If a policyholder elects to pay their premium in installments rather than in full, the policyholder is generally charged a flat service fee intended to compensate the insurer for the additional administrative costs of processing more frequent billings. As such, there is no underwriting risk associated with this amount, so it should not be recorded as premium—it should be recorded under finance and service charges not included in premiums (Line 13).

Aggregate write-ins for miscellaneous income (Line 14) includes gain or loss from sale of equipment, retroactive reinsurance, gain or loss on foreign, corporate expenses, and fines and penalties from regulators: must be included here and disclosed separately regardless of materiality.

Discuss the items removed from income to get net income

Dividends to policyholders (Line 17) records policyholder dividends declared, on an accrual basis, not paid basis (equal to dividends paid plus the change in accrued dividends). Federal and foreign income taxes incurred (Line 19) includes amounts incurred during the year, including amounts related to prior years, but excluding any amounts that would be deferred to later years.

Discuss the capital and surplus account section and its main components

The capital and surplus account section (Lines 21-39) records changes in surplus that are not reflected in the income statement (Lines 1-20) and reconciles the beginning surplus with the ending surplus.

Change in unrealized capital gains (Losses) (Line 24) are changes in the fair value of assets that are still held by the company.

Change in net unrealized foreign exchange capital gains (losses) (Line 25) are similar to unrealized capital gains but are specific to unrealized changes in asset prices due to changes in exchange rates.

Change in net deferred income tax (Line 26) affect surplus on the balance sheet through deferred tax assets (DTAs) and liabilities (DTLs) but do not affect income, therefore we must make a direct charge to surplus here for the change in the net amount of deferred tax during the year.

Change in non-admitted assets (Line 27) to the extent non-admitted assets increase, surplus will decrease.

Change in provision for reinsurance (Line 28) to the extent the provision for reinsurance increases, surplus will decrease.

Cumulative effect of changes in accounting principles (Line 31) accounts for any changes in accounting principles used, either as the result of new guidance or internal policy.

Capital changes and surplus adjustments (Lines 32 and 33) records the net inflow (outflow) of capital from the new issuance of stock.

Dividends to stockholders (Line 35) represent a return on the stockholder's investment.