CFR Ch. 14 – Schedule F

Outline

Schedule F details an insurer's reinsurance transactions on *prospective contracts* (retroactive contracts are excluded from Schedule F). It includes the names of the counterparties to the transactions and the premium, loss, and expense amounts associated with those transactions. This information is important to actuaries for the following *three reasons*:

- 1) Loss and LAE reserves recorded by an insurer include assumed business. Actuaries should understand the sources and amounts of assumed reinsurance when assessing the reasonableness of the gross and net reserves
- 2) Loss and LAE reserves recorded on the balance sheet are net of reinsurance. It is crucial that actuaries understand the collectability of that reinsurance. In addition, the NAIC requires that the Appointed Actuary do the following before commenting on reinsurance collectability:
 - Solicit information from management on any collectability problems
 - Review ratings given to reinsurers by rating agencies
 - Examine Schedule F for the current year for indications of regulatory action or reinsurance recoverables over 90 days past due
- 3) The Statement of Actuarial Opinion requires the Appointed Actuary to comment on and disclose the amount of net reserves for the insurer's participation in underwriting pools and associations

As mentioned in a prior chapter, the provision for reinsurance is included as a liability on the balance sheet. It provides a "minimum reserve for uncollectible reinsurance with an additional reserve required if an entity's experience indicates that a higher amount should be provided." The derivation of the provision of reinsurance is included on Schedule F.

Structural Organization of Schedule F

Schedule F is comprised of *six parts*:

- 1) Part 1 Assumed Reinsurance as of December 31, Current Year (\$000 Omitted)
- 2) Part 2 Premium Portfolio Reinsurance Effected or Canceled during Current Year
- 3) Part 3 Ceded Reinsurance as of December 31, Current Year (\$000 Omitted)
- 4) Part 4 Issuing or Confirming Banks for Letters of Credit from Schedule F, Part 3 (\$000 Omitted)
- 5) Part 5 Interrogatories for Schedule F, Part 3 (\$000 Omitted)
- 6) Part 6 Restatement of Balance Sheet to Identify Net Credit for Reinsurance

I. Part 1 – Assumed Reinsurance

Part 1 provides the total amount of the insurer's assumed reinsurance balances by reinsured. Each reinsured is separated into the following groups and categories:

- Affiliated insurers
 - o U.S. Intercompany pooling
 - o U.S. Non-pool Captive
 - o U.S. Non-pool Other
 - Other (non-U.S.) Captive
 - Other (non-U.S.) Other
- Other U.S. unaffiliated insurers
- Pools and associations
 - o Mandatory pools, Associations or Other Similar Facilities
 - o Voluntary pools, Associations or Other Similar Facilities
- Other non-U.S. insurers

Premiums

The columns in Part 1 associated with premiums are as follows:

- Assumed written premium (column 5)
 - o Reconciles to the sum of reinsurance assumed from affiliates and reinsurance assumed from non-affiliates in the Underwriting and Investment Exhibit
- Assumed premiums receivable, less commissions payable (column 10)
 - o Commissions payable represents fixed commissions, not contingent commissions
 - o If an insurer writes a reinsurance contract for a premium of \$500,000 with a fixed ceding commission of 25% (with all of it unpaid at the end of year), then column 10 would show \$500,000(1-0.25) = \$375,000
- Unearned premium on assumed business (column 11)
 - o Reconciles to item (1) within the "Reinsurance" note of the "Notes to the Financial Statements"

Loss and LAE Liabilities

The columns in Part 1 associated with loss and LAE liabilities are as follows:

- Reinsurance recoverable on paid losses and LAE (column 6)
 - Losses and LAE already paid by the cedant but not yet paid by the reporting entity (i.e., the insurer)
- Reinsurance on known case losses and LAE (column 7)
 - Losses and LAE reported by the cedant that have been included in the insurer's direct plus assumed Schedule P, Part 1 reserves
- Column 8 is the sum of columns 6 and 7

It is *important to note* that there are *no IBNR reserves* reported in Part 1. This is because Part 1 only considers reinsurance contracts where the reporting entity is the **assuming** company.

Assuming companies are responsible for determining their own IBNR reserves. In other words, they do not report IBNR reserves assumed from a ceding company.

Contingent Commissions

Column 9 provides a listing of contingent commissions payable. These are profit commissions from assumed contracts that have yet to be paid since they are "contingent" on the profitability of the contract. It is *important to note* that this is an additional or return commission contingent upon a contract's profitability.

Example: Contingent Commissions

Assume an insurer writes a reinsurance contract for a premium of \$500,000 with a 25% ceding commission that has the following characteristics:

- Commission is on a one-to-one sliding scale with loss ratio
- The 25% ceding commission assumes a 75% loss ratio

Assuming no premiums or ceding commissions have been paid at the end of the first year, the assumed premiums receivable in column 10 would be \$500,000 (no fixed commissions to subtract) and the contingent commissions payable in column 9 would be \$500,000(0.25) = \$125,000.

One year later, assume that the \$500,000 in premiums have been paid to the insurer and the \$125,000 in ceding commissions have been paid to the cedant. Further assume that the loss ratio ended at 65% instead of the 75% that was expected. In this case, the insurer owes the cedant \$500,000(0.75-0.65) = \$50,000 in additional ceding commission since the commission is on a one-to-one sliding scale with loss ratio. Thus, the amount of assumed premium receivable in column 10 would be 0 and the amount of contingent commissions in column 9 would be \$50,000.

Security

The remaining columns of Part 1 are associated with forms of security that cedants require of their reinsurers to avoid credit risk. The forms of security include the following:

• Funds held by reinsured companies

- Represents a portion of the premium due to the reinsurer that is withheld by the cedant to pay claims (typically replenished when it runs out)
- The funds reduce credit risk since there is money on hand that the cedant can use to pay claims
- The funds also reduce the administrative burden of collecting reimbursement from the insurer each time a covered loss payment occurs

• Letters of credit

- Represents credit issued by a bank in favor of the reinsured to ensure payment if the reinsurer defaults
- Letters of credit are <u>advantageous</u> to cedants because they are not subject to an
 insolvent reinsurer's bankruptcy or liquidation proceedings. Instead, the funds
 will be provided by the bank if needed
- Letter of credit are <u>disadvantageous</u> to reinsurers for <u>two reasons</u>:
 - Banks charge a fee for the letter of credit, which can be expensive in uncertain economic times
 - The letter of credit reduces the reinsurer's line of credit with the bank, which reduces the amount of collateralization available to the reinsurer for its debt obligations

Amount of assets pledged or collateral held in trust

O Assets or collateral amounts under the control of the reinsurer

II. Part 2 – Premium Portfolio Reinsurance Effected or Canceled

Part 2 provides a listing of <u>portfolio reinsurance</u> transactions (i.e., complete transfer of policies inforce or current liabilities) effected or canceled during the current year. Companies purchase portfolio reinsurance for the <u>following reasons</u>:

- Discontinue writing a certain LOB
- Remove the risk or uncertainty associated with the liabilities from their books
- Surplus relief

One <u>disadvantage</u> of portfolio reinsurance is that it requires a risk premium be paid to the reinsurer which can make the transactions costly.

III. Part 3 - Ceded Reinsurance

Part 3 provides a listing of the company's <u>ceded reinsurance balances</u> by reinsurer. It also provides the information needed for the user to identify amounts recoverable from each reinsurer and assess <u>credit risk</u>.

Each reinsurer is grouped into the same categories shown in Part 1, with one caveat: the groups are provided separately for authorized reinsurers, unauthorized reinsurers, and certified reinsurers. It should also be mentioned that Part 3 also includes protected cells, which are companies that are organized into separate cells, each with its own assets and liabilities.

Part 3 is separated into 5 sections:

- Columns 1 20 detail the ceded reinsurance balances
- Columns 21 36 calculate credit risk on ceded reinsurance
- Columns 37 53 provide the aging of ceded reinsurance
- Columns 54 69 provide the calculation of the Provision for Reinsurance for Certified
 Reinsurance
- Columns 70 78 provide the Total Provision for Reinsurance (authorized, unauthorized and total)

Special Code

In the first few columns, Part 3 provides a number of identifiers/codes for each reinsurer. One particularly important column is **column 5**, which provides the **special code**. The special code identifies reinsurance relationships that regulators might be interested in analyzing of where special considerations are made when calculating the provision for reinsurance.

Special Code "2" - Cessions of 75% or More of Subject Premium

Special code "2" identifies any reinsurance contract where 75% or more of the subject premium is ceded. The intent is to determine if an insurer is acting as a fronting carrier for the reinsurer, which would allow the reinsurer to avoid regulatory oversight. As an **example**:

- Insurer A would like to write WC coverage for a retail business with locations in California
- Due to strict licensing requirements, Insurer A is not licensed to write WC coverage in California
- Insurer A asks Insurer B (who is licensed) to write WC coverage and cede all of the exposure to Insurer A for a fronting fee

There are times where extreme ceding is acceptable. Examples include:

- Intercompany cessions with affiliates, which are used to share risks across related companies
- Cessions to a group, pool, or organization of insurers that underwrite jointly

Special Code "3" – Counterparty Reporting Exception for Asbestos and Pollution Contracts Under SSAP 62R

Special code "3" identifies those reinsurers that have been aggregated into one line in Schedule F as part of the counterparty reporting exception for asbestos and pollution contracts under SSAP 62R. This exception allows the Provision for Reinsurance to be reduced by reflecting that amounts have been recovered by the reporting entity under duplicate coverage provided by the

retroactive contract, and that inuring balances from the original contracts are payable by the retroactive counterparty (if applicable).

Special Code "4" – Incurred but not Reported Losses on Contracts in Force Prior to July 1, 1984 that are Exempt from the Statutory Provisions for Unauthorized Reinsurance

All IBNR losses on contracts in force prior to July 1, 1984 and NOT subsequently renewed are exempt from the provision for unauthorized reinsurance.

Premiums Ceded

Column 6 of Part 3 provides the amount of written premium that is ceded to each of the company's reinsurers during the year.

Reinsurance Recoverables

The columns of Part 3 regarding reinsurance recoverables are as follows:

- Columns 7 and 8 provide recoverables on paid losses and LAE
 - These represent payments made by the primary insurer to the claimant that have yet to be reimbursed by the reinsurer
- Columns 9 through 12 provide recoverables on unpaid loss and LAE
 - O These represent losses and LAE that have yet to be paid by the primary and which will eventually be reimbursed by the reinsurer
 - o It is *important to note* that the unpaid loss and LAE includes IBNR reserves since the reporting entity is the ceding company
 - This is unlike Part 1 where only case reserves are reported since the reporting entity is the assuming company
- Column 13 provides the amount of unearned premium ceded to reinsurers
- Column 14 provides the amount of contingent commissions receivable from reinsurers
 - Unlike Part 1, this represents a receivable rather than a payable since the reporting entity is considered the cedant in Part 3

- It is <u>important to note</u> that this amount can be negative if the reinsurer's experience
 has been worse than expected and the reporting entity is expected to return some
 of the commission already received
- Column 15 is the sum of columns 7 through 14
 - Note that if the Special Code column = 4, then column 15 should be reduced by columns 11 and 12 (IBNR Loss & LAE reserves). This only applies to unauthorized reinsurance
- Column 16 identifies amounts in dispute that are *included in column 15*
 - Amounts in dispute are those for which the reinsurer has disputed amounts due through formal written notification, arbitration or litigation

Reinsurance Payable

The columns of Part 3 regarding reinsurance payable are as follows:

- Columns 17 and 18 provide other amounts payable by the insurer to the reinsurer ("ceded balances payable" and "other amounts due to reinsurers")
 - Note that column 18 excludes funds held by the insurer as these are shown in column 20
- Column 19 provides the <u>net amount recoverable from reinsurers</u>
 - o It is equal to column 15 minus columns 17 and 18
 - o This column will be important for the certified reinsurer provision for reinsurance

Funds Held

Column 20 provides the liability for funds held by the company under reinsurance treaties.

Credit Risk on Ceded Reinsurance

Columns 21 through 36 have two purposes:

• Provide information needed to calculate the provision for reinsurance

 Provide information needed to calculate the credit risk charge for reinsurance recoverables for RBC purposes

For the credit risk charge, only cessions to non-affiliated companies are included in the calculation. Cessions to state mandated residual market mechanisms, the National Council on Compensation Insurance, Federal Insurance Programs, and U.S. parents, subsidiaries and affiliates are exempt from the charge.

The amount of the credit risk charge is dependent on *two things*:

- 1) Whether or not the insurance recoverables are collateralized
- 2) The financial strength of the reinsurers (based on the current rating received from an approved rating agency)

Since the credit risk charge depends on collateralization, the credit risk charge is calculated separately for collateralized and uncollateralized recoverables in columns 35 and 36.

Each reinsurer rating is mapped to a designation category (1 through 7), each with its own credit risk charge. The factors for each rating are as follows:

Rating	1	2	3	4	5	6	7
Collateralized Charge	3.6%	4.1%	4.8%	5.0%	5.0%	5.0%	5.0%
Uncollateralized Charge	3.6%	4.1%	4.8%	5.3%	7.1%	14.0%	10.0%

<u>Credit Risk Charge on Collateralized Recoverables</u>

The credit risk charge on collateralized recoverables is calculated as follows:

 $min(Total\ Collateral, Stressed\ Net\ Recoverable) imes Collateralized\ Factor$

Total Collateral

Total collateral includes the following items:

• Multiple beneficiary trusts (Column 21)

- Letters of credit (Column 22)
- Single beneficiary trusts & other allowable collateral (Column 24)

Stressed Net Recoverable

The stressed net recoverable is defined as follows:

$$120\% \times (Recoverables_{Total} - Prov. for Reins._{Total}) - Reins.Payable - Funds Held$$

where:

- $Recoverables_{Total} = all reinsurance recoverables (Columns 7 14)$
- *Prov. for Reins.* Total = provision for reinsurance for the reinsurer (Column 78)
- Reins. Payable = ceded balances payable + other amounts due to reinsurers (Columns 17 – 18)
- *Funds Held* = liability for funds held by the company under reinsurance treaties (Column 20)

Credit Risk Charge on Uncollateralized Recoverables

The credit risk charge on uncollateralized recoverables is calculated as follows:

 $max(Stressed\ Net\ Recoverable\ -\ Total\ Collateral, 0) \times Uncollateralized\ Factor$

Example: Credit Risk Charge

A primary insurer purchases reinsurance from an unauthorized reinsurer. Given the following (in \$000):

- Reinsurance recoverables on paid losses = 800
- Reinsurance recoverables on case loss reserves = 400
- Reinsurance recoverables on IBNR loss reserves = 200
- Reinsurance recoverables on UEPR = 125

- Ceded balances payable = 100
- Fund held by the company = 150
- Multiple beneficiary trusts = 40
- Letters of credit = 20
- Single beneficiary trusts & other allowable collateral = 10
- Provision for reinsurance = 241
- Credit risk factor on collateralized recoverables = 3.6%
- Credit factor on uncollateralized recoverables = 3.6%

First, let's calculate the credit risk charge on collateralized recoverables:

- $Total\ Collateral = 40 + 20 + 10 = 70$
- $Recoverables_{Total} = 800 + 400 + 200 + 125 = 1,525$
- $Prov. for Reins._{Total} = 241$
- Reins. Payable = 100 + 0 = 100
- Funds Held = 150
- Stressed Net Recoverable = $120\% \times (1,525 241) 100 150 = 1,290.80$
- Credit Risk Charge_{Collateralized} = $min(70,1290.80) \times 0.036 = 2.52$

Second, let's calculate the credit risk charge on uncollateralized recoverables:

• Credit Risk Charge_{Uncollateralized} = $max(1,290.80 - 70,0) \times 0.036 = 43.95$

The total credit risk charge is 2.52 + 43.95 = \$46,470.

Aging of Ceded Reinsurance

Columns 37 through 53 provide a breakdown by age of the paid losses and LAE that have yet to be reimbursed by the reinsurer (i.e. paid loss and LAE recoverables). The age categories are as follows:

• Current (Column 37)

- 1 to 29 days (Column 38)
- 30 to 90 days (Column 39)
- 91 to 120 days (Column 40)
- Over 120 days (Column 41)

The total paid loss and LAE recoverables overdue is the sum of columns 38 through 41 and is shown in column 42. The total paid loss and LAE recoverables due is the sum of columns 37 through 41 and is shown in column 43.

The <u>aging of each recoverable</u> begins on one of the following dates:

- The date in which claims are to be paid by the reinsurer (if specified in the contract)
- The date in which claims are to be reported to the reinsurer (if specified in the contract)
- The date in which the recoverable exceeds \$50,000 and is entered into the insurer's ledger as a paid recoverable (if no payment or reporting date is specified in the contract)

If no payment or reporting date is specified AND the recoverable is less than \$50,000, the recoverable is recorded as current. Note also that recoverables from mandatory pools and associated are also recorded as current.

Example: Aging

Consider the following scenario:

- A loss occurs on April 15
- The loss is paid by the ceding company on June 15
- The contract states that the losses must be paid by the reinsurer within 30 days from the date that the loss is paid by the primary insurer

In this case, the due date is July 15. If the recoverable is not paid by December 31, then it would be 169 days overdue.

Provision for Reinsurance for Certified Reinsurance

Columns 54 through 69 are specific to certified reinsurers and provide the Provision for Reinsurance for Certified Reinsurers. This is by far the most complicated provision to calculate.

Certified reinsurers are **non-U.S. reinsurers** domiciled in Qualified Jurisdictions (i.e., Bermuda, France, Germany, Ireland, Japan, Switzerland and the United Kingdom)

Prior to 2012, these reinsurers would have been classified as unauthorized. *After 2012*, these reinsurers can apply for and attain certification from the reporting entity's domiciliary state as a certified reinsurer.

A non-U.S. reinsurer that is <u>not</u> certified is required to post 100% collateral for its U.S. claims. Once a reinsurer is certified, reinsurers are able to reduce the amount of collateral required for its U.S. claims. The amount of collateral required is determined by its rating (from 1 to 6):

- A rating of 1 is considered the most secured from a financial strength perspective.

 Reinsurers with this rating are not required to post any collateral
- A rating of 6 is considered the least secure. Reinsurers with this rating are required to post 100% collateral
- Ratings of 2 through 5 require reinsurers to post 10%, 20%, 50% and 75%, respectively

There are *two primary benefits* of the certified category:

- 1) The reporting entity does not get penalized as much (in terms of the provision for reinsurance) as an unauthorized reinsurer
- 2) The reinsurer does not have to post as much collateral

The provision for certified reinsurance is *comprised of two parts*:

- 1) Provision for reinsurance ceded to certified reinsurers due to collateral deficiency
- 2) Provision for overdue reinsurance ceded to certified reinsurers

Provision for Reinsurance Ceded to Certified Reinsurers Due to Collateral Deficiency

The provision for reinsurance ceded to certified reinsurers due to collateral deficiency is defined as follows:

Net Amount Recoverable

The net amount recoverable is defined as follows:

$$Recoverables_{Total} - Reins.Payable$$

Credit Allowed for Net Recoverables

The credit allowed for net recoverables is defined as follows:

$$\boxed{\textit{Cat. Recovs.} + \left[(\textit{Net Amount Recov.} - \textit{Cat. Recovs.}) \times \min\left(\frac{\textit{Provided Coll.}}{\textit{Required Coll.}}, 100\%\right) \right]}$$

where:

- *Cat. Recovs.* = Catastrophe recoverables qualifying for collateral deferral (Column 57)
- $Provided\ Coll. = Total\ Collateral\ +\ Funds\ Held\ (Columns\ 20-22\ \&\ Column\ 24)$
- $\bullet \quad \textit{Required Coll.} = \textit{Full Credit Coll.} \textit{Percent} \times (\textit{Net Amount Recov.} \textit{Cat.Recovs.})$

<u>Provision for Overdue Reinsurance Ceded to Certified Reinsurers</u>

The provision for overdue reinsurance ceded to certified reinsurers depends on whether or not the reinsurer is a slow-payer. Collectability is less of a concern for reinsurers who are not considered slow payers.

Slow-Pay Ratio

To determine if a reinsurer is a slow-payer, we must calculate the slow-pay ratio:

$$Slow\ Pay\ Ratio\ =\ \frac{Recoverable\ on\ Paid\ Loss\ \&\ LAE_{>90\ Days\ Overdue}^{Not\ Disputed}}{Recoverable\ on\ Paid\ Loss\ \&\ LAE_{Total}^{Not\ Disputed}\ +\ Received\ Prior\ 90\ Days}$$

Provision for Overdue Reinsurance Ceded to Certified Reinsurers (Not Slow-Paying)

If the reinsurer is not slow-paying (slow-pay ratio < 20%), the provision for overdue reinsurance ceded to certified reinsurers is as follows:

where the *provision is capped* at the credit allowed for net recoverables.

Provision for Overdue Reinsurance Ceded to Certified Reinsurers (Slow-Paying)

If the reinsurer is slow-paying (slow-pay ratio \geq 20%), the provision for overdue reinsurance ceded to certified reinsurers is as follows:

$$20\% \times max(Recov. on Paid Loss \& LAE_{>90 Days Overdue}, Net Unsecured Recov.)$$

where:

- Net Unsecured Recov. = max(Credit Allowed for Net Recovs. Prov. Coll.,0)
- The *provision is capped* at the credit allowed for net recoverables

Example: Provision for Reinsurance for Certified Reinsurance

A primary insurer purchases reinsurance from a certified reinsurer. Given the following as of December 31, 2019 (in \$000):

- Reinsurance recoverables on paid losses & LAE = 90
- Reinsurance recoverables on paid losses & LAE > 90 days past due = 40

- Reinsurance recoverables on case loss reserves = 20
- Total disputed recoverables = 15
- Disputed recoverables on paid losses & LAE = 12
- Disputed recoverables on paid losses & LAE > 90 days past due = 12
- Ceded balances payable = 6
- Other amounts due to reinsurers = 4
- Fund held by the company = 2
- Letters of credit = 3
- Amounts received in the prior 90 days = 0
- Catastrophe recoverables qualifying for collateral deferral = 4
- Certified reinsurer rating = 5

Provision for Reinsurance Ceded to Certified Reinsurers Due to Collateral Deficiency

First, let's calculate the net amount recoverable:

- $Recoverables_{Total} = 90 + 20 = 110$
- Reins. Payable = 6 + 4 = 10
- Net Amount Recoverable = 110 10 = 100

Second, let's calculate the provided collateral:

• Provided Coll. = Total Collateral + Funds Held = 3 + 2 = 5

Third, let's calculate the required collateral:

- Full Credit Coll. Percent = 75% since a certified reinsurer rating of 5 maps to a required collateral percentage of 75%
- *Cat. Recovs.* = 4
- Required Coll. = $75\% \times (100 4) = 72$

Fourth, let's calculate the credit allowed for net recoverables:

• Credit Allowed for Net Recovs. = $4 + \left[(100 - 4) * min\left(\frac{5}{72}, 100\%\right) \right] = 10.67$

Finally, let's calculate the provision for reinsurance due to collateral deficiency:

- Net Amount Recoverable = 100
- Credit Allowed for Net Recovs. = 10.67
- Provision = 100 10.67 = 89.33

Provision for Overdue Reinsurance Ceded to Certified Reinsurers

First, let's determine if the reinsurer is a slow-payer:

- Recoverable on Paid Loss & $LAE_{>90~Days~Overdue}^{Not~Disputed} = 40 12 = 28$
- Recoverable on Paid Loss & $LAE_{Total}^{Not \ Disputed} = 90 12 = 78$
- Received Prior 90 Days = 0
- Slow Pay Ratio = $\frac{28}{78+0}$ = 35.9%
- Since the slow-pay ratio \geq 20%, the certified reinsurer is a slow-payer

Second, let's calculate the net unsecured recoverable:

- Credit Allowed for Net Recovs. = 10.67
- *Provided Coll.* = 5
- Net Unsecured Recov. = max(10.67 5.0) = 5.67

Finally, let's calculate the provision for overdue reinsurance:

- Recov. on Paid Loss & LAE_{>90 Days Overdue} = 40
- Net Unsecured Recov. = 5.67
- $20\% \times max(40, 5.67) = 8$

The total provision for reinsurance for this certified reinsurer is 89.33 + 8 = \$97,330.

Total Provision for Reinsurance

The total provision for reinsurance is provided in column 78 and is comprised of the following three elements:

- 1) Provision for authorized reinsurance
- 2) Provision for unauthorized reinsurance
- 3) Provision for certified reinsurers

Provision for Amounts Ceded to Authorized Reinsurers

An authorized reinsurer is one that is either licensed or accredited in the cedant's state of domicile. The provision for amounts ceded to authorized reinsurers depends on whether or not the reinsurer is a slow-payer.

Provision for Amounts Ceded to Authorized Reinsurers (Not Slow-Paying)

If the reinsurer is not slow-paying (slow-pay ratio < 20%), the provision for overdue authorized reinsurance is as follows:

$$20\% \times Recoverable$$
 on Paid Loss & LAE_{>90 Days Overdue}

Provision for Amounts Ceded to Authorized Reinsurers (Slow-Paying)

If the reinsurer is slow-paying (slow-pay ratio \geq 20%), the provision for overdue authorized reinsurance is as follows:

$$20\% \times max(Collateral\ Deficiency, Recoverable\ on\ Paid\ Loss\ \&\ LAE_{>90\ Days\ Overdue})$$

Collateral Deficiency

Collateral deficiency is defined as follows:

$$Collateral\ Deficiency = max(Recoverables_{Total} - Allowable\ Offsets, 0)$$

where allowable offsets include the following items:

- Ceded balances payable (Column 17)
- Other amounts due to reinsurers (Column 18)
- Funds held by the company (Column 20)
- Multiple beneficiary trusts (Column 21)
- Letters of credit (Column 22)
- Single beneficiary trusts & other allowable collateral (Column 24)

Provision for Amounts Ceded to Unauthorized Reinsurers

An unauthorized reinsurer is one that is neither authorized nor certified. The provision for amounts ceded to unauthorized reinsurers is *comprised of two pieces*:

- 1) The provision for reinsurance for unauthorized reinsurers due to collateral deficiency
- 2) The provision for overdue reinsurance for unauthorized reinsurers

The total provision for unauthorized reinsurers is as follows:

Collateral Deficiency + 20% ×
$$\left(\begin{array}{c} Recoverable \ on \ Paid \ Loss \& \ LAE_{>90 \ Days \ Overdue}^{Not \ in \ Dispute} \\ + \ Total \ Recoverable^{Disputed} \end{array} \right)$$

where the *provision is capped* at the total recoverable.

In the Statement of Actuarial Opinion, the Appointed Actuary comments on the collectability of reinsurance. It's important to understand that a large provision for reinsurance does not necessarily indicate collectability issues. For example, a large provision could result merely from the fact that a reinsurer is unauthorized.

Example: Provision for Reinsurance for Authorized & Unauthorized Reinsurers

A primary insurer purchases reinsurance from two reinsurers. Given the following as of December 31, 2019 (in \$000):

	Reinsurance Recoverable on Paid Losses and Paid Loss Adjustment Expenses					
Name of Reinsurer	Current	1 to 29 Days	30 to 90 Days	91 to 120 Days	Over 120 Days	Total
Authorized – Other – U.S. Unaffiliated Insurers						
Reinsurer A	80	40	10	50	0	180
Unauthorized – Other – U.S. Insurers						
Reinsurer B	50	20	0	5	0	75

Name of Reinsurer	Total Recoverables	Letters of Credit	Funds Held by the Company	Amounts Received Prior 90 Days	Disputed Recoverables on Paid Losses & LAE	Disputed Recoverables on Paid Losses & LAE More than 90 Days Overdue
Reins. A	200	20	10	30	20	5
Reins. B	105	15	10	0	7	0

• There are no other disputed recoverables from those listed above

<u>Provision for Reinsurance for the Authorized Reinsurer</u>

First, let's determine if the reinsurer is a slow-payer:

- Slow Pay Ratio = $\frac{50-5}{(180-20)+30}$ = 23.7%
- Since the slow-pay ratio \geq 20%, the authorized reinsurer is a slow-payer

Second, let's calculate the collateral deficiency:

- $Recoverables_{Total} = 200$
- Allowable Offsets = 20 + 10 = 30
- Collateral Deficiency = max(200 30,0) = 170

Third, let's calculate the provision for reinsurance for the authorized reinsurer:

- Recoverable on Paid Loss & LAE_{>90 Days Overdue} = 50
- $Provision = 20\% \times max(170, 50) = 34$
- The provision for reinsurance for the authorized reinsurer is \$34,000

Provision for Reinsurance for the Unauthorized Reinsurer

First, let's calculate the collateral deficiency:

- $Recoverables_{Total} = 105$
- Allowable Offsets = 15 + 10 = 25
- Collateral Deficiency = max(105 25,0) = 80

Second, let's calculate the provision for reinsurance for the unauthorized reinsurer:

- Recoverable on Paid Loss & LAE_{>90 Days Overdue} = 5 0 = 5
- $Total\ Recoverable^{Disputed} = 7$
- $Provision = 80 + 20\% \times (5 + 7) = 82.4$
- The provision for reinsurance for the unauthorized reinsurer is \$82,400

IV. Part 4 – Issuing or Confirming Banks for Letters of Credit from Part 3

Part 4 of Schedule F provides a listing of the issuing or confirming banks for letters of credit as collateral reported in Part 3. Note that confirming banks provide a guarantee on a letter of credit such that the confirming bank will pay if the original bank issuing the letter of credit does not.

V. Part 5 - Interrogatories for Part 3

Part 5 provides interrogatories for Part 3. *Two tables* are included in those interrogatories and are important for regulators.

The first table identifies the top five provisional commission rates under the reporting entity's reinsurance contracts where the ceded premium is greater than \$50,000. The commission rates are considered in conjunction with the following:

- 1) Column 14 of Part 3 describing contingent commissions receivable
- 2) Note to Financials on reinsurance assumed and ceded

By reading these three items together, regulators can identify companies using reinsurance to mask high operating leverage. To understand this, let's look at example.

Example: Using Reinsurance to Mask High Operating Leverage

Assume that an insurer has \$150M of direct written premium and surplus of \$25M. Without reinsurance, this results in a premium to surplus ratio of 600%. As shown in IRIS Ratio 2, the ratio of net written premium to surplus must be less than 300% to avoid regulatory scrutiny. To reduce its premium to surplus ratio, the insurer purchases reinsurance to provide surplus relief. Consider the two scenarios below:

- Scenario 1 The insurer purchases a 30% quota share contract with a 35% fixed ceding commission
 - The net written premium is \$150M(1 0.30) = \$105M
 - o The ceding commission is \$150M(0.30)(0.35) = \$15.75M
 - Thus, at the onset of the contract, the policyholder surplus grows from \$25M to
 \$40.75M (adding the ceding commission to the original surplus)
 - O The net written premium to surplus ratio is $\frac{\$105M}{\$40.75M} = 258\%$
- Scenario 2 The insurer purchases a 30% quota share contract with a 35% provisional ceding commission that decreases by one point with every one-point increase in the loss ratio from 65%
 - At the onset of the contract, this contract provides the same net written premium to surplus ratio of 258%

- O However, if the actual loss ratio turns out to be 80%, the company must return a portion of the original ceding commission. In this case, the company must return \$150M(0.30)(0.80 0.65) = \$6.75M of the original \$15.75M ceding commission.
- Now, the net written premium to surplus ratio is $\frac{\$105M}{\$40.75M \$6.75M} = 309\%$. Since this is greater than 300%, IRIS Ratio 2 would be triggered

In the example above, Scenario 1 is a legitimate way to use reinsurance to provide surplus relief. The problem with Scenario 2 is that a high provisional ceding commission was used to avoid regulatory scrutiny from IRIS Ratio 2. Note that IRIS Ratio 4 would have triggered under either of the scenarios above.

The **second table** identifies the five largest reinsurance recoverables reported in column 15 of Part 3, the associated ceded premiums and an indicator as to whether or not the reinsurer is affiliated with the reporting entity.

VI. Part 6 – Restatement of Balance Sheet to Identify Net Credit for Reinsurance

Part 6 restates the balance sheet of the insurer as if it had no reinsurance protection. In Part 6, there are three columns for each asset and liability item:

- 1) Column 1 As Reported (Net of Ceded)
 - These are the net amounts as reported on the Annual Statement
- 2) Column 2 Restatement Adjustments
 - These are the required adjustments to the net amount to put them on a gross basis
- 3) Column 3 Restated (Gross of Ceded)
 - These are the gross amounts

The assets that require adjustment are as follows:

- Reinsurance recoverables on loss and LAE payments The adjustment is simply a reversal of the amount shown on the original balance sheet
- Net amount recoverable from reinsurers The adjustment is a balancing item. This means that the adjustment is set equal to the amount required to force the asset adjustments to equal the liability adjustments

The *liabilities that require adjustment* are as follows:

- Losses and LAE The adjustment is equal to the amount of loss and LAE reserves ceded to the reinsurer
- Unearned premiums The adjustment is equal to the amount of unearned premium reserve ceded to the reinsurer
- Ceded reinsurance premiums payable The adjustment is simply the reversal of the amount shown on the original balance sheet. If there is no reinsurance, then there will be no ceded reinsurance premiums payable
- Funds held by company under reinsurance treaties The adjustment is simply the reversal of the amount shown on the original balance sheet. If there is no reinsurance, then there will be no ceded reinsurance premiums payable
- **Provision for reinsurance** The adjustment is simply the reversal of the amount shown on the original balance sheet. If there is no reinsurance, then there will be no provision for reinsurance

Surplus is not adjusted because the total asset adjustments equal the total liability adjustments.

Example: Restating the Balance Sheet

Assume we are given the following information excerpt for an insurer:

	As Reported (Net of Ceded)
Assets	,
Reinsurance recoverable on loss and LAE payments	426,000
Net amount recoverable from reinsurer	0
	•••
Liabilities	
Loss and LAE expenses	51,557,000
Unearned premiums	11,895,000
Ceded reins. prems. payable (net of ceding commissions)	440,000
Funds held by company under reinsurance treaties	170,000
Provision for reinsurance	283,000

- The reinsurance recoverables on unpaid losses and LAE are equal to \$10,142,000
- The reinsurance recoverables on unearned premiums equal to \$920,000

We now have all of the information needed to restate these items:

	As Reported (Net of Ceded)	Restatement Adjustments	Restated (Gross of Ceded)
Assets			
Reins. recov. on loss and LAE payments	426,000	(426,000)	0
Net amount recoverable from reinsurer	0	10,595,000	10,595,000
	•••	•••	•••
Totals	•••	10,169,000	•••

Liabilities			
Loss and LAE expenses	51,557,000	10,142,000	61,699,000
Unearned premiums	11,895,000	920,000	12,815,000
Ceded reins. prems. payable (net of ceding comm.)	440,000	(440,000)	0
Funds held by company under reinsurance treaties	170,000	(170,000)	0
Provision for reinsurance	283,000	(283,000)	0
		•••	
Totals	•••	10,169,000	•••

As we can see from the table above, the adjustments are fairly simple. The only item that requires a calculation is the net amount recoverable from reinsurer asset. As mentioned earlier, this is a balancing item. Once we know the total liability adjustments, we can back into the amount of this asset to force the asset adjustments to equal the liability adjustments. In this case, the adjustment for this asset is 10,169,000 - (-426,000) = 10,595,000.

VII. Criticisms of Schedule F

Criticisms of Schedule F include the following (listing a few of them here):

- The provision for reinsurance is strictly formulaic and could mask the true estimate of uncollectible reinsurance
- There is no statistical basis for the provision for reinsurance formula
- Unauthorized reinsurance may provide more and/or higher-quality reinsurance at a lower price than a competing authorized reinsurer
- The costs associated with collateral requirements may be passed down to the primary policy, increasing the cost of insurance
- Schedule F does not tell us anything about the reinsurer's solvency, which is the true source of collectability risk

Despite the criticisms above, Schedule F is still an important tool for solvency monitoring for the following reasons:

- It identifies the amount of gross losses coming from the insurer's assumed reinsurance transactions
- It provides an estimate of the significance of the insurer's assumed and ceded reinsurance transactions to its surplus
- Quantifies credit risk related to reinsurance recoverables for purposes of the NAIC RBC formula
- It identifies the insurer's reinsurers that may require further scrutiny because they are either slow-payers or not regulated