A Credit Disability Insurance and Credit Involuntary Unemployment Insurance Claim Termination Study

By
The Society of Actuaries
Credit Insurance Experience Committee

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I. EXECUTIVE SUMMARY

The credit disability tables published in the 1968, 1970, and 1974 NAIC Proceedings contain continuance tables; however, the data and intent of those tables are quite dated and were not intended to create tools for actuaries to calculate disabled life reserves. For example, the tables were not age-specific. Actuaries know that age at disablement is a very significant variable for constructing a disability claim reserve table.

Because of the problems with existing credit disability tables, the Credit Insurance Experience Committee assembled disabled life data in order to develop more information for actuaries calculating disabled life credit disability reserves. This study captured claim termination experience from twelve company groups writing credit disability insurance. The companies are listed by company group in Attachment V. The company groups contributing to the disability portion of the study comprise 84% of the credit disability earned premium in 2011.

In the course of the Committee's work, it observed that claim experience under credit involuntary unemployment had never been studied on an intercompany basis and decided to add this type of business to the study. Because credit involuntary unemployment insurance is not written by all of the contributing groups, only six company groups contributed data to the credit unemployment study.

It is not the intent of this paper to recommend a valuation standard for claim reserving. Rather, the opposite. We believe that the study shows significant variations that disprove the value of an industry-wide table. The industry-wide data will certainly be helpful to companies with insufficient experience to construct their own termination studies. Such carriers may elect to use the industry-wide data to calculate some reserves or combine it with their own data. Even companies with large blocks of business will find benefit from comparing the industry-wide data to their own experience.

This report has been organized into five sections:

I. Executive Summary
II. Summary of current claim reserving practices and need for this study
III. Summary of the procedures used in the study and a listing of attachments
    a. Data collection
    b. Processing of individual contributors
    c. Collection into a single dataset
    d. Calculation of termination rates and actual-to-expected ratios
    e. Calculation of comparative criteria for various data sub-segments
IV. Post-Processing development of tables for use by practitioners
V. Study results and observations by the Committee

II. Current Practices

Companies writing credit disability generally use one or more of the following reserve methods for reported claims:

- Claim lag or developmental methods, generally producing a total claim liability and reserve, which includes the Disabled Life Reserve; or
- Continuing Claim Reserve (CCR) or Disabled Life Reserve, based on published or modified table

CCR methods necessitate the use of estimates of IBNR and ICOS, in addition to the reserve on claims currently being paid on. The study focuses solely on the calculation of claim reserves for claims in the payout status.

The current tables commonly used for credit disability continuing claim reserves include the following:

- 1964 Commissioners Disability Table, "CDT" (built into many administrative systems)
- 1985 CIDA Table (blended or using age/occupation class specific information)
- Modifications of the above tables, based on company study
- Individual company experience

There are few statutory standards for the establishment of claim reserves for credit disability contracts. The Model Accident and Health Reserve Regulation and Appendix A-010 of the Accounting Practices and Procedures Manual states that:

> "A generally accepted actuarial reserving method or other reasonable method or a combination of methods may be used to estimate all claim liabilities. The methods used for estimating liabilities generally may be aggregate methods, or various reserve items may be separately valued. Approximations based on groupings and averages may also be employed. Adequacy of the claim reserves, however, shall be determined in the aggregate."

Credit actuaries have long been aware that published tables did not reflect experience under credit disability contracts and have used various methods to adapt and modify the published tables to ensure reserve adequacy. It is our hope that this report, and the database tool described in Attachment 3, will provide useful data and information to either modify published tables more accurately or develop alternate tables independently from previously published tables.

III. Study Procedure

1. Data was requested from companies – see Attachment 1
2. Data was tabulated and compiled for each company's dataset – see Attachment 2
3. Data was combined into a single database – see Attachment 3
4. Termination Rates and Actual to Expected ratios were calculated – See Attachments 4
5. Claim reserves were calculated for specific cases, based on a weighted exposure - See Attachments 5

The details for each step are provided in the attachments (along with commentary).

IV. Post-Processing Table Development

Credit Disability

Using the data from the overall study, we developed raw claim termination rates for each durational time segment and each central age. These are shown in Attachment 4.1. We believe that termination rates based on amount of monthly indemnity are preferable to termination rates based on the number of claims because the monthly indemnity basis is more indicative of the financial effect of reserve calculations and variations.

With these raw results, we developed Actual-to-Expected (A/E) ratios of termination rates based on the 1964 CDT for each central age and time segment in the study. These are shown in Attachment 4.2.

Although incidence rates are not a component in developing claim reserves, some systems and methods need to make use of continuance tables to develop claim reserves. Since incidence rates are necessary to set the starting claim counts in continuance tables, we constructed a continuance table using the 8-day incidence rates in the 1964 CDT and the A/E ratios, limiting the A/E to 5.00 (affecting only one study cell). Since the incidence rates were not studied (nor have they been validated for credit experience), the continuance table itself has no application other than it may be used to construct disabled life reserve values. The continuance table is shown in Attachment 4.4.

In order to attempt to identify the characteristics of the business that have a significant bearing on the claim reserves, we calculated weighted average claim reserves for an illustrative sample claim. The sample claim we selected involved the calculation of a claim reserve (per $100 monthly indemnity) as of the 31st day of disability, and reflected a two-year maximum benefit period. We calculated the claim reserve for each of the selected business characteristics studied, except for the calculation by state of residence of the claimant. Those claim reserves, and the associated actual 30-day exposure by amount (so that credibility may be assessed), are shown in Attachment 5.1.

It is important to note that where there is “Unknown” information, such as in the gender of the claimant, the variation in the reserve calculated may be more indicative of the company characteristics that reported gender versus those that did not. For example, the Unknown gender reflects a higher claim reserve than either gender, which is not intuitive.

Credit Involuntary Unemployment

Using the data from the overall study, we developed raw claim termination rates for each durational time segment and each central age (Attachment 4.5). With these raw results, we developed an adjusted table by doing little other than investigating for consistency across the rows (durations) of the table, and manually smoothing the termination rates (Attachment 4.6).

Using these adjusted termination rates, we composed a weighted average table using the 31-day exposure as a weighting basis (“Weighted” column at far right in Attachment 4.6).

We did not construct a continuance table similar to the disability table above; however, one could easily be constructed using the termination rates and an arbitrary radix.

Business that was identified as monthly premium (as opposed to single premium) was isolated since the study results suggest a much lower rate of termination for monthly premium business. It is generally thought that the monthly indemnity for monthly premium involuntary unemployment business claims is generally smaller than that for single premium. As a result, the claims associated with monthly premium business are not as likely to be filed unless they are expected to persist (or already have) for a longer time period. Additionally, because of their size, these claims are not as likely to be as "closely adjudicated" as single premium claims. The raw claim termination and "smoothed" tables are shown in Attachment 4.7 and 4.8, respectively.

In order to attempt to identify the characteristics of the business that have a significant bearing on the claim reserves for unemployment claims, we also calculated claim reserves (per $100 monthly indemnity) as of the 31st day of involuntary unemployment, and reflected a one-year maximum benefit period. We calculated the claim reserve for each of the selected business characteristics studied, except for the calculation by state of residence of the claimant. The claim reserves and the associated 30-day exposure by amount are shown in Attachment 5.2.

As in the Disability results, the reader is cautioned in the interpretation of the reserve for "Unknown" information, such as in the gender of the claimant, since the variation in the reserve calculated may be more indicative of the company characteristics that reported gender versus those that did not.

V. Results and Observations

Experimentation with the database has produced many results, some surprising and some expected.

Credit Disability Results

1. Actual to Expected (A/E) ratios during the first months of disability are below unity for the most part. This means that the early termination rates in the 1964 CDT are higher in the first year of claim than the experience for the business studied.
2. The A/E ratio in the later part of the first year of claim are much higher, quite possibly reflecting the move from the "own-occupation" to "any occupation" definition of total disability at 12 months claim duration contained in most credit disability contracts.
3. The A/E ratios remain higher than unity until approximately the 60th month, when they drop noticeably. A/E ratios are generally very low in years past seven. This is possibly due to the fact that claims that have already lasted a number of years are often put on automatic payment and on-going claims adjudication is less rigorous.
4. Industry-wide, the recession had a mild effect on claim reserves, less than 5% based on the overall results of the study. This is evidenced by the ratio of the "All Business" claim reserve calculation for Recession Years versus All Years on Attachment 5.1. However, this result was not uniform across all the sub-segments of the business shown in Attachment 5.1.
5. In looking at the claim reserve calculations, we believe that there is quite a bit of overlap in the results. For instance,
    a. 7-day waiting period claims are noticeably more persistent (lower termination rates) than the average for the study
    b. Finance company claims are more persistent than average

    While the results in a. and b. may be independent, we found that approximately three-fourths of the 7-day retroactive business that was reported in the study shows "Finance Company" as the source of business.

Credit Involuntary Unemployment Results

Considerably more single premium business was analyzed than monthly premium, even though Credit Involuntary Unemployment is historically considered to be most prevalent in the credit card (monthly premium) market. We would expect that at least part of the reason is that detailed claims data is more accessible for single premium business. Additionally, credit card business has been largely converted to debt protection contracts, so there has been a sharp and consistent decline in the monthly premium credit involuntary unemployment insurance premiums earned over the study period. The single premium credit involuntary unemployment insurance product is typically sold by consumer finance companies, where loan size average has been historically small (about $2,000) and whose average loan terms are relatively short (about 18 months).

1. The study results indicate that the monthly premium business has much more persistent claims.
2. No significant terminations were observed after the 24th month of claim.

3. Raw termination rates are fairly level by age and duration, except at the very lowest and highest ages.
4. The recession had a mild effect on claim reserves, approximately 5% based on the overall results of the study. This was unexpected because of adverse industry experience, particularly in 2009.

List of Contributing Company Groups and Member Companies

Major Credit Insurance members of each Company Group are Underlined

American National Group

- American National Insurance Company
- American National Life Insurance Company
- American National Property and Casualty Company
- American National County Mutual Insurance Company
- American National General Insurance Company
- American National Lloyds Insurance Company
- ANPAC LA Insurance Company

Assurant Group

- American Bankers Insurance Company of Florida
- American Bankers Life Assurance Company
- American Reliable Insurance Company
- American Security Insurance Company
- Bankers American Life Assurance
- Caribbean American Life Assurance
- Caribbean American Property Insurance Company
- Financial Insurance Exchange
- First Fortis Life Insurance Company
- Ford Life Insurance Company
- Fortis Benefits Insurance Company
- Fortis Insurance Company
- John Alden Life Insurance Company
- Houston National Life Insurance Company
- Life Insurance Company of Mississippi
- MS Life Insurance Company
- Reliable Lloyds Insurance Company
- Security Assurance Company of Puerto Rico
- Standard Guaranty Insurance Company
- Union Security Life Insurance Company
- Voyager Indemnity Insurance Company
- Voyager Life & Health Insurance Company
- Voyager Life Insurance Company
- Voyager P&C Insurance Company

Central States and Berkshire Hathaway Groups

- Central States H&L Company of Omaha
- Central States Indemnity Company

CitiGroup

- American Financial Life Insurance
- Associates Financial Life Insurance Company
- Associates Financial Life Insurance Company of Texas
- American Health & Life Insurance Company
- Citicorp Life Insurance Company
- Continental Life Insurance Company
- Family Insurance Corp
- First Citicorp Life Insurance Company
- National Benefit Life Insurance Company
- Primerica Insurance Holdings
- Transport Life Insurance Company
- Triton Insurance Company

CUNA Mutual Financial Group

- Cumis Insurance Society Inc
- CUNA Mutual Insurance Society
- Members Life Insurance Company

Fortegra Financial Group

- American Guaranty Insurance Company
- Anthem Life Insurance Company
- Bankers Life of Louisiana
- Classic Life Assurance Company
- Commonwealth Life Insurance Company
- Consumers Life Insurance Company of North Carolina
- Georgia International Life Insurance Company
- Independent Life & Accident
- Insurance Company of the South
- Integon Financial Life Insurance Company
- Integon Life Insurance Corporation
- Investors Fidelity Life Assurance
- Life of the South Insurance Company
- Lyndon Southern Insurance Company
- Southern Financial Life Insurance Company
- Triangle Life Insurance Company

HSBC Company Group

- First Central National Life Insurance
- Household Life Insurance Company
- Household Life Insurance Company of Delaware
- Service General Insurance Company

IAC Group of Companies

- Individual Assurance Company Life, Health and Accident

Inter Americas Group

- American Underwriters Life Insurance Company
- Century Life Assurance Company

Life of Louisiana Group

- Life Insurance Company of Louisiana

Securian Group

- Cherokee National Life Insurance Company
- CNL Insurance America Inc
- Minnesota Life Insurance Company
- Securian Casualty Company
- Securian Life Insurance Company

Aegon

- Life Investors Insurance Company of America
- International Life Investors
- Monumental Life Insurance Company
- Monumental General Life Insurance Company of Puerto Rico
- Stonebridge Casualty Insurance Company
- Stonebridge Life Insurance Company
- Transamerica Financial Life Insurance Company
- Transamerica Life Insurance & Annuity
- Transamerica Life Insurance Company
- Transamerica Occidental LIC
- TransUnion Casualty Company

ATTACHMENT 1: DATA REQUEST

Data Request:

In August of 2011, the Society of Actuaries sent a request to insurers requesting that they participate in a termination study by contributing experience data. The data would be compiled into comma delimited files using the format defined below.

Field Description	Data Type	Data Length	Options/Description
Company Name	Alphanumeric	20	Name of Company
Claim Identifier Number	Alphanumeric	20	Company's Unique Claim Identifier
State	Alphanumeric	2	Two-Digit State or Province Code UU = Unknown
Type of Claim	Alphanumeric	1	D = Disability U = Unemployment
Cause of Claim	Alphanumeric	1	A = Accident S = Sickness U = Unknown Z = Unemployment Claim
Monthly Benefit Amount	Numeric	10	Include 2 Decimals
Total Claim Amount Paid	Numeric	10	Include 2 Decimals
Gender	Alphanumeric	1	F = Female M = Male U = Unknown or unavailable
Age at Claim Incidence	Numeric	2	Age at Date Disability or Unemployment Began
Incurred Date	Date	8 (MMDDYYYY)	Date Disablement or Unemployment Began
Claim Paid-to Date	Date	8 (MMDDYYYY)	Date the Claim was Paid Through
Benefit Expiration Date	Date	8 (MMDDYYYY)	Last Date Through Which Benefits could have been Paid at Time of Incurral
Claim Status as of File End Date	Numeric	1	0 = Pending 1 = Open 2 = Closed
Reason for Claim Termination	Numeric	1	1 = Benefit Expiration or lump sum settlement (due to permanent disability) 2 = Other (Death, Recovery, Return to Employment, Loan Paid Off) 9 = Unknown or Still Active
Waiting Period in Days	Numeric	2	e.g. 03, 07, 14, 30, 90 99 = Other or Unknown

Retro or Non-Retro	Numeric	1	0 = Non-Retro 1 = Retro 9 = Unknown
Critical Period Indicator	Numeric	1	0 = Full Benefit 1 = Critical Period with Recurring Maximum Benefit 2 = Critical Period with Limited Lifetime Benefits 9 = Other or Unknown
Own Occupation Period in Months	Numeric	2	Number of Months after which Insured must be Disabled from "any fitting occupation" for Continued Disability 00 = Any Occupation from Beginning of Claim 12 = 12-month, 18 = 18-month, etc. 90 = Own Occupation Throughout Claim Period 99 = Unknown or n/a for Unemployment
Source of Business	Numeric	1	1 = Credit Union 2 = Finance Company 3 = Bank 4 = Auto Dealer 5 = Retail Dealer 9 = Unknown
Sales Method	Numeric	1	0 = Point of Sale 1 = Non-specific Post-Point of Sale Marketing 2 = Direct Mail 3 = Telephone 4 = Internet 9 = Unknown or Other
Premium Method	Numeric	1	0 = Single Premium 1 = Monthly or Periodic Premium
Type of Loan	Numeric	1	0 = Installment other than Real Estate Secured 1 = First Lien Mortgage 2 = Second Lien Mortgage or other Real Estate-Secured 3 = Home Equity LOC 4 = Credit Card 5 = Other Revolving 9 = Unknown or Other

ATTACHMENT 2: DATA COMPILATION

Processing the Requested Data:

The data we received from the various companies was, for the most part, in the requested format. However, we needed to make some minor additions to the data in order to make it workable for the termination study software. Some of the columns of data were empty or null, so we replaced these values. The following tables detail the addition that was made to the data.

Field Description	Value if Null
All Dates	01-01-1900
State	UU
Cause of Claim	U
Gender	U
Waiting Period Days	99
Retro or Non-Retro	9
Own Occupation Period	99
Source of Business	9
Sales Method	9

After converting null values, many fields needed further validation. The following table provides an overview of the steps that were performed on the data that was received to further validate the data. Note, the code for functions described in the following table is provided later in this document.

Field Description	Reason for Edit	Edit Code/Script
Type of Claim	Many of the files we received did not contain a Claim Type value. The null value was replaced with an empty string.	ConvertNull([Type Of Claim],"")
Monthly Benefit Amount	Many of the files we received did not contain a Monthly Benefit Amount. The null value was replaced with a 0.	CDbl(ConvertNull([Monthly Benefit Amount],"0"))
Age at Claim Incidence	Many of the files we received did not contain a Age at Claim Incidence. The null value was replaced with a 0.	CDbl(ConvertNull([IncidenceAge],0))
Incurred Date	Many files contained unformatted dates (i.e. “01011900” or 1011900). The dates were sent as either text or numbers. The values needed to be converted to actual calendar dates.	CDate(ValidCalDate(Format$([IncurredDate],"00-00-0000")))
Claim Paid-to Date	Many files contained unformatted dates (i.e. “01011900” or 1011900). The dates were sent as either text or numbers. The values needed to be	CDate(ValidCalDate(Format$([ClaimPaidToDate],"0 0-00-0000")))

	converted to actual calendar dates.	
Benefit Expiration Date	In some cases the Benefit Expiration Date was given to us as 99999999. This value was converted to a null value since 99999999 could not be used as a valid calendar date.	IIf([BenefitExprDate]="99999999",Null,CDate(ValidCalDate(Format$([BenefitExprDate],"00-00-0000"))))
	The following code was used to validate the Benefit Expiration Date given to us in most files.	CDate(ValidCalDate(Format$([BenefitExprDate],"00-00-0000")))
Source of Business	In some files the Source of Business was not given to us as a numeric value so the value 9 (the code used for Unknown) was used substituted.	IIf([BusinessSource]="?",9,[BusinessSource])

Function Code:

The previous section outlined the various additions we made to the data to make it usable by the software program. The following section contains the code used for the functions to validate the field data.

```
'Procedure: ConvertNull
'  Comment: Convert Null value to a string value.
'   Inputs: value to test, optional value to return if test value is null
'  Returns: non null value
'  Assumes: nothing
'  Created: John Miller 06-09-2008
'============================================================================
=
'
Public Function ConvertNull(ByVal vvPossibleNull As Variant, _
                            Optional ByVal vsDefaultValue As String =
vbNullString) As String

    On Error GoTo ConvertNull_Error

    'Process-------------------------------------------------------------------
-
    If (IsNull(vvPossibleNull) = True) Then
        ConvertNull = vsDefaultValue
    Else
        ConvertNull = CStr(vvPossibleNull)
    End If
    '--------------------------------------------------------------------------
-

ConvertNull_Exit:
    Exit Function

ConvertNull_Error:
    ErrorMessage Err.Number, Err.Description, mcCALLINGAREA & "ConvertNull"
    Resume ConvertNull_Exit
End Function



'Procedure: ValidCalDate
'  Comment: Validate and attempt to fix bad dates.
'   Inputs: date value as a string to be tested
'  Returns: date value
'  Assumes: nothing
'  Created: John Miller 09-20-2011
'============================================================================
=
'
Public Function ValidCalDate(ByVal vsDateValue As String) As Variant
    Dim iDatePart As Integer
    Dim iPos As Integer
    Dim sChar As String
    Dim sDay As String
    Dim sMnth As String
    Dim sYr As String

    On Error GoTo ValidCalDate_Error

    'Process-------------------------------------------------------------------
-
    '--initialize
```

```
    iDatePart = 0
    sDay = ""
    sMnth = ""
    sYr = ""
    ValidCalDate = Null

    '--determine if the parameter is a valid date
    If (IsDate(vsDateValue) = True) Then
        ValidCalDate = CDate(vsDateValue)
    Else
        For iPos = 1 To Len(vsDateValue)
            '--get current character
            sChar = Mid(vsDateValue, iPos, 1)

            '--validate character
            If (sChar = "-") Or (sChar = "/") Then
                iDatePart = iDatePart + 1
            Else
                Select Case iDatePart
                    'Month
                    Case 0
                        sMnth = sMnth & sChar

                    'Day
                    Case 1
                        sDay = sDay & sChar

                    'Year
                    Case 2
                        sYr = sYr & sChar
                End Select
            End If
        Next

        '--attempt to fix date
        For iPos = 1 To 3
            '--subtract day(s)
            sDay = CStr(CInt(sDay) - iPos)

            '--test new date; if successful return new value
            If (IsDate(sMnth & "-" & sDay & "-" & sYr) = True) Then
                ValidCalDate = CDate(sMnth & "-" & sDay & "-" & sYr)
                iPos = 99
            End If
        Next
    End If
    '---------------------------------------------------------------------------
-

ValidCalDate_Exit:
    Exit Function

ValidCalDate_Error:
    ErrorMessage Err.Number, Err.Description, mcCALLINGAREA & "ValidCalDate"
    Resume ValidCalDate_Exit
End Function
```

Exposure and Termination Rules:

Set up an array of beginning and end dates for each exposure record:

DateDef (1,Interval) = IncurredDate + [Start of Each Time Interval]

DateDef (2,Interval) = IncurredDate + [End of Each Time Interval]

Set Exposure Start Date:

If IncurredDate + EliminationPeriod < StudyStartDate then ExposureStartDate = StudyStartDate

Otherwise

ExposureStartDate = IncurredDate + EliminationPeriod + 1

Set Exposure End Date:

If ClaimPaidToDate > StudyEndDate or Claim is "Open" then ExposureEndDate = StudyEndDate

Otherwise if

BenefitExpirationDate < ClaimPaidToDate then ExposureEndDate = BenefitExpirationDate

Otherwise

ExposureEndDate = ClaimPaidToDate

Calculate Exposures and Terminations for All Time Intervals:

For a given record, loop through all time intervals

If the time interval ends before StudyStartDate, No exposure is counted, no termination is recorded

If the time interval begins after StudyEndDate, No exposure is counted, no termination is recorded

If the time interval "straddles" the StudyStartDate, count exposure:

If the claim terminates by recovery or death before the end of the time interval, count exposure from StudyStartDate to the end of the time interval

If the claim does not terminate by recovery or death before the end of the time interval, count exposure from StudyStartDate to the end of the time interval or ExposureEndDate, if sooner

If the time interval starts after the StudyStartDate, count exposure:

If the claim terminates by recovery or death before the end of the time interval, count exposure to the end of the time interval or StudyEndDate, if sooner

If the claim does not terminate by recovery or death before the end of the time interval, count exposure to the first of:

ClaimPaidToDate

End of the time interval; or

ExposureEndDate

Record exposure count and amount:

Write an ExposureCount Record equal to measured exposure

Write an ExposureAmount Record equal to measured exposure times the MonthlyBenefit

If claim terminated during the period due to death or recovery, record termination amount and count

Write a TerminationCount Record equal to 1

Write a TerminationAmount Record equal to MonthlyBenefit

Go to next record

Criteria for classifying terminations:

1. If a record is coded as terminating due to death or recovery, it is counted as a termination for the purposes of the study.
2. If a record is coded as terminating due to benefit expiration, it is not counted as a termination for purposes of the study.
3. If the ExposureEndDate is equal to StudyEndDate, it is not counted as a termination for purposes of the study.
4. If the [ExposureEndDate is within 45 days of the BenefitExpirationDate and the record is coded as “Claim is Closed”] or [ExposureEndDate is equal to BenefitExpirationDate], then the record is not counted as a termination for the purposes of the study (assume benefit expiration).
5. If none of the above, it is counted as a termination for purposes of the study (all other possibilities are exhausted).
6. If a claim was identified as terminating by reason of “Benefit Expiration or Lump Sum Settlement” (Reason 1), then exposure was counted to the end of the benefit period without a termination recorded.

For the Termination Study, the above process was executed on each database file given to us. The resulting data was then collected from each database into a separate database file. The summary operation was performed on the collected data, which removed any uniquely identifying characteristics from the data and prepared the data for the reporting tool.

Compiling the Output Data:

After each database has been processed, the output records are grouped and summarized. The output results are linked with their respective input records. The data is then grouped by state, claim type, claim cause, gender, waiting period, retro, occupation period, business source, sales method, premium method, loan type, age group, record type, and duration.

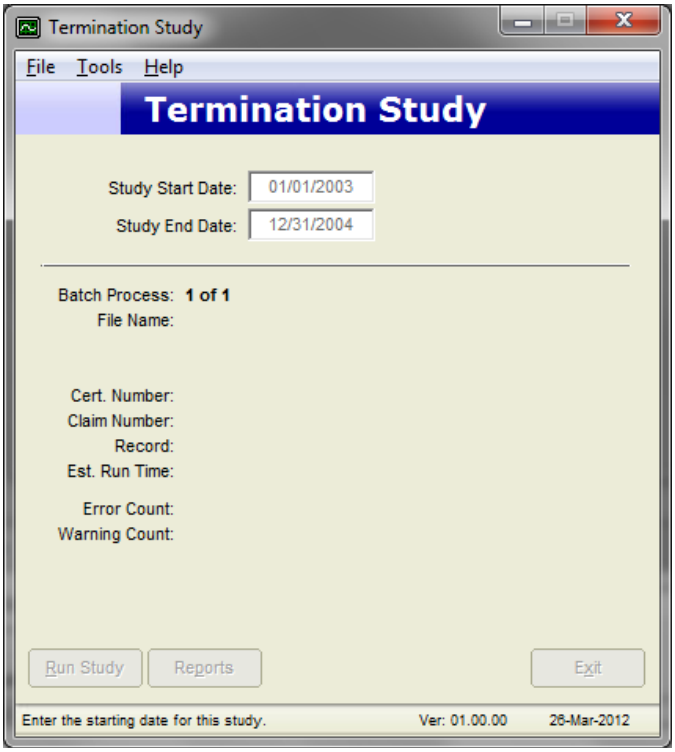
Within each record group, the record types, which are identified as exposure count, exposure value, termination count, or termination value, are summarized. At this point, the resulting table is ready for use with the Termination Study reporting tool. The reporting tool can be used to look at an individual company's database file, allowing the user to filter the data and make custom reports.

The summary operation described above was performed on the collected data, which removed any uniquely identifying characteristics from the data and prepared the data for the reporting tool.

ATTACHMENT 3: DATABASE

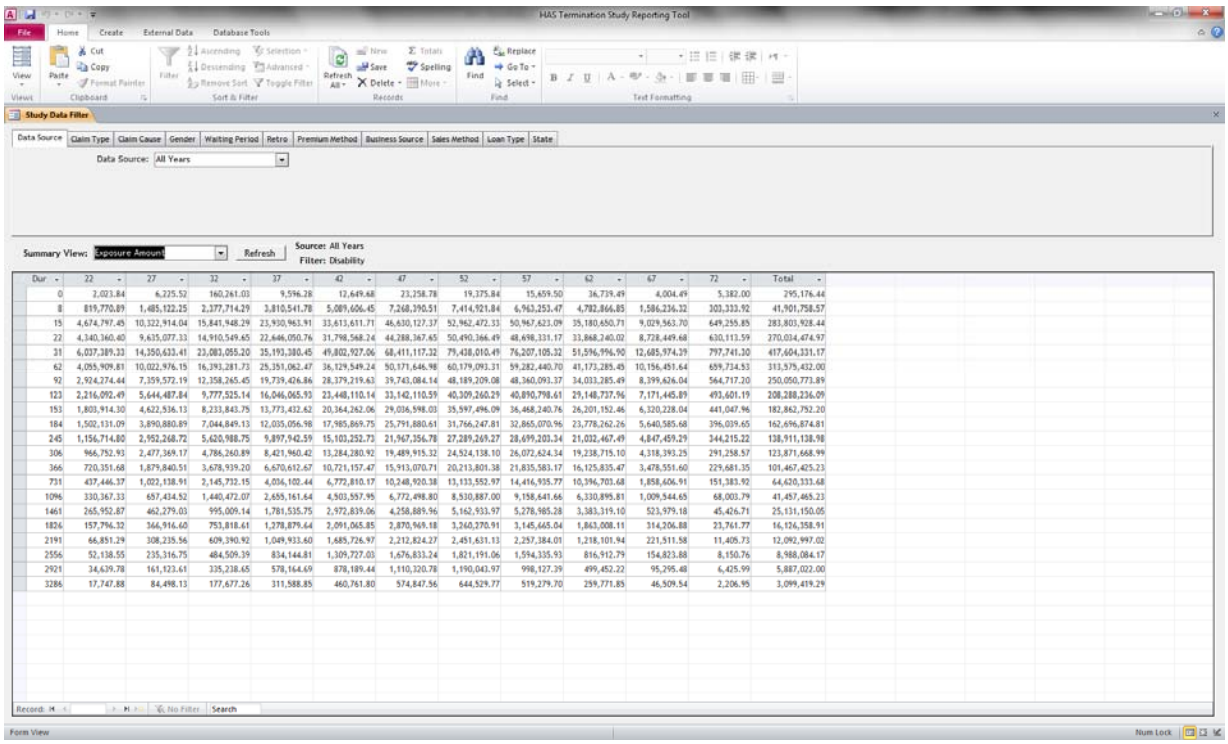
Running the Termination Study Software:

When the Termination Study software is opened, the user is presented with the following screen. Each of the database files containing data sent to us is processed through this application. The files can be processed individually or in a batch. The application stores all calculated values within the same input database file, ensuring all client data remains together.



Termination Study Reporting Tool:

Below is a screenshot of the Termination Study Reporting Tool. The reporting tool will allow the user to filter the termination study results using various filters. The filter results can be viewed and copied to a spreadsheet or other application for further use.



The reporting tool has a series of tabs that contain various filtering options:

- Data Source (All years for study or Recession years only)
- Claim Type (Disability or Unemployment; no option to combine)
- Claim Cause *
- Gender *
- Waiting Period *
- Retro *
- Premium Method *
- Business Source *
- Sales Method *
- Loan Type *
- State * (can select multiple states)

* To activate filter, select the check box and then select the filter criteria from the associated list box.

The Summary View list box allows the user to select what data should be displayed:

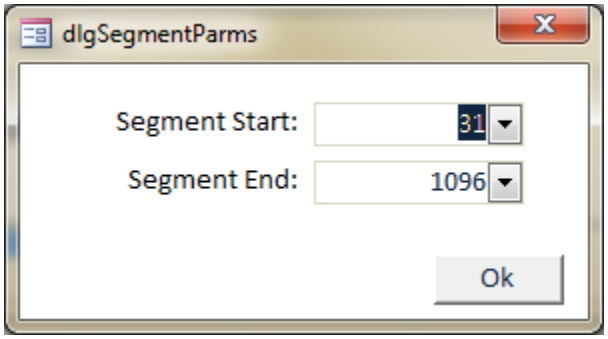
- Exposure Amount
- Exposure Count
- Termination Amount
- Termination Count
- Termination Rates Amount
- Termination Rates Count
- Actual to Expected Amount*
- Actual to Expected Count*
- Claim Reserve Amount**
- Claim Reserve Count**

*The 1964 CDT was used for the "Expected" termination rates for disability for each central age. In the calculation of claim reserves, if the Actual-to-Expected value is zero (indicating no or sparse data), the program defaults to the 1964 CDT termination rate for that particular age/duration cell. For the unemployment table, we constructed an "expected" table from the early results of the study, so Actual to Expected for unemployment is fairly meaningless. We anticipate that once the study is complete; an "expected" table will be constructed based on termination rates and amount of coverage for the entire study.

** The claim reserve is calculated for each age and blended ages for a $100 monthly indemnity amount. The Claim Reserve calculations require additional input in the beginning and ending periods for the calculation of the claim reserve. The input time interval is expressed in days, as shown in the following table:

Days	Months or Years
8	
15	
22	
31	1 month
62	2 months
92	3 months
123	4 months
153	5 months
184	6 months
245	8 months
306	10 months
366	1 Year
731	2 Years
1,096	3 Years
1,461	4 Years
1,826	5 Years
2,191	6 Years
2,556	7 Years
2,921	8 Years
3,286	9 Years
3,651	10 Years

For instance, if you want to calculate the claim reserve based on 30 days from disablement through the third year (3-year maximum benefit period), you would use the following input:



Once the filter criteria and summary view option have been selected, click the 'Refresh' button to refresh the grid with new data. The reporting tool does not have an export option, but data can be transferred to other applications using the clipboard. The user can click the upper left corner of the grid to select all data within the grid, press Ctrl+C to copy the selected data to the clipboard, switch to another application like Excel, and press Ctrl+V to paste the data into the application.

ATTACHMENT 4.1: CREDIT DISABILITY RAW CLAIM TERMINATION RATES-ALL BUSINESS-ALL YEARS

2011 Intercompany Credit Disability Claim Termination Study												
Raw Termination Rates Based on Amount of Insurance – All Years												
Days	Months of Disability	Age at Disablement										
		22	27	32	37	42	47	52	57	62	67	72
8-14	1	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02
15-21	1	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.02
22-30	1	0.13	0.12	0.10	0.10	0.09	0.09	0.08	0.07	0.06	0.06	0.04
31-61	2	0.32	0.30	0.28	0.28	0.27	0.26	0.23	0.21	0.19	0.19	0.11
62-91	3	0.27	0.26	0.24	0.22	0.21	0.20	0.19	0.17	0.16	0.16	0.08
92-122	4	0.24	0.22	0.20	0.18	0.17	0.16	0.15	0.14	0.13	0.14	0.06
123-152	5	0.18	0.17	0.15	0.13	0.13	0.12	0.11	0.10	0.09	0.10	0.04
153-183	6	0.16	0.15	0.14	0.11	0.11	0.10	0.09	0.08	0.08	0.09	0.05
184-244	7-8	0.23	0.22	0.19	0.16	0.15	0.14	0.12	0.11	0.10	0.12	0.13
245-305	9-10	0.17	0.14	0.14	0.14	0.11	0.10	0.08	0.07	0.07	0.09	0.12
306-365	11-12	0.22	0.20	0.19	0.17	0.15	0.13	0.11	0.09	0.09	0.11	0.09
366-730	13-24	0.36	0.37	0.35	0.32	0.29	0.27	0.24	0.21	0.24	0.27	0.37
731-1095	25-36	0.19	0.24	0.23	0.23	0.21	0.21	0.20	0.20	0.22	0.30	0.15
1096-1460	37-48	0.12	0.16	0.19	0.18	0.19	0.20	0.20	0.22	0.24	0.27	0.05
1461-1825	49-60	0.07	0.10	0.12	0.15	0.16	0.17	0.19	0.21	0.24	0.17	0.49
1826-2190	61-72	0.01	0.03	0.05	0.04	0.05	0.07	0.08	0.12	0.12	0.07	1.47*
2191-2555	73-84	0.00	0.01	0.02	0.02	0.03	0.04	0.07	0.07	0.15	0.03	0.00
2556-2920	85-96	0.00	0.00	0.01	0.02	0.02	0.03	0.04	0.07	0.06	0.04	0.00
2921-3285	97-108	0.01	0.01	0.01	0.02	0.03	0.04	0.07	0.08	0.07	0.09	0.00
3286-3650	109-120	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.07	0.07	0.07	0.00
*Unreasonable value; adjusted in developing tables in 4.3 and 4.4												

The termination rates shown in the above table represent the amount of insurance that terminated over the number of days period shown, divided by the amount of insurance at the beginning of the period by age at disability. For example, 6% (or 0.06) of the amount of insurance at day 7 terminated by the end of day 14 of disability for those becoming disabled at age 22.

ATTACHMENT 4.2: CREDIT DISABILITY ACTUAL TO EXPECTED CLAIM TERMINATION RATES (EXPECTED = 1964 CDT)-ALL BUSINESS-ALL YEARS

2011 Intercompany Credit Disability Claim Termination Study												
Actual to Expected Termination Rates Based on 1964 CDT												
Days	Months of Disability	Age at Disablement										
		22	27	32	37	42	47	52	57	62	67	72
8-14	**1**	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.18	0.20	0.19	0.15
15-21	**1**	0.25	0.23	0.21	0.21	0.22	0.22	0.22	0.23	0.21	0.23	0.20
22-30	**1**	0.41	0.36	0.34	0.33	0.34	0.34	0.33	0.33	0.34	0.38	0.29
31-61	**2**	0.51	0.48	0.46	0.47	0.47	0.47	0.44	0.43	0.44	0.48	0.34
62-91	**3**	0.52	0.48	0.45	0.43	0.44	0.45	0.46	0.47	0.52	0.62	0.42
92-122	**4**	0.54	0.49	0.44	0.41	0.40	0.41	0.44	0.46	0.53	0.76	0.64
123-152	**5**	0.49	0.46	0.41	0.36	0.36	0.37	0.37	0.40	0.46	0.73	0.62
153-183	**6**	0.54	0.50	0.46	0.39	0.39	0.40	0.41	0.45	0.52	0.88	0.96
184-244	**7-8**	0.67	0.62	0.56	0.47	0.45	0.48	0.47	0.48	0.54	0.90	1.41
245-305	**9-10**	0.87	0.75	0.76	0.78	0.62	0.67	0.60	0.60	0.58	0.95	1.33
306-365	**11-12**	1.89	1.66	1.65	1.62	1.53	1.54	1.36	1.12	1.03	1.25	1.00
366-730	**13-24**	1.14	1.23	1.23	1.17	1.14	1.17	1.21	1.34	1.74	2.10	3.07
731-1095	**25-36**	0.79	1.04	1.07	1.17	1.23	1.34	1.38	1.56	1.81	2.54	1.29
1096-1460	**37-48**	0.68	0.93	1.35	1.42	1.44	1.71	1.87	2.05	2.23	2.42	0.45
1461-1825	**49-60**	0.42	0.81	1.05	1.50	1.91	1.93	2.21	2.28	2.38	1.61	4.16
1826-2190	**61-72**	0.09	0.31	0.50	0.43	0.59	0.91	1.07	1.39	1.29	0.72	11.88*
2191-2555	**73-84**	0.04	0.11	0.18	0.35	0.47	0.53	0.92	0.82	1.65	0.30	0.00
2556-2920	**85-96**	0.00	0.03	0.19	0.27	0.35	0.53	0.59	0.89	0.68	0.41	0.00
2921-3285	**97-108**	0.13	0.09	0.20	0.27	0.45	0.56	0.92	0.99	0.76	0.82	0.00
3286-3650	**109-120**	0.00	0.14	0.25	0.43	0.67	0.92	0.98	0.91	0.68	0.58	0.00
*Unreasonable value; adjusted in developing tables in 4.3 and 4.4												

ATTACHMENT 4.3: CREDIT DISABILITY –CLAIM TERMINATION RATES – BY APPLYING A/E (Limiting Value of 5) to 1964 CDT

2011 Intercompany Credit Disability Claim Termination Study												
Actual to Expected Termination Rates Based on 1964 CDT												
Days	Months of Disability	Age at Disablement										
		22	27	32	37	42	47	52	57	62	67	72
8-14	1	0.0572	0.0595	0.0553	0.0504	0.0476	0.0441	0.0387	0.0328	0.0330	0.0269	0.0178
15-21	1	0.0698	0.0632	0.0563	0.0542	0.0521	0.0482	0.0442	0.0414	0.0335	0.0320	0.0237
22-30	1	0.1181	0.1063	0.0955	0.0901	0.0850	0.0786	0.0705	0.0622	0.0572	0.0571	0.0361
31-61	2	0.3276	0.3048	0.2914	0.2857	0.2788	0.2638	0.2365	0.2126	0.1990	0.1917	0.1110
62-91	3	0.2743	0.2554	0.2361	0.2170	0.2095	0.2037	0.1891	0.1731	0.1631	0.1614	0.0790
92-122	4	0.2433	0.2186	0.1961	0.1801	0.1680	0.1610	0.1549	0.1419	0.1336	0.1364	0.0626
123-152	5	0.1826	0.1700	0.1505	0.1313	0.1256	0.1176	0.1062	0.0981	0.0926	0.1001	0.0393
153-183	6	0.1609	0.1493	0.1354	0.1149	0.1096	0.1033	0.0945	0.0829	0.0775	0.0890	0.0479
184-244	7-8	0.2347	0.2211	0.1923	0.1610	0.1477	0.1388	0.1228	0.1050	0.0984	0.1192	0.1327
245-305	9-10	0.1654	0.1436	0.1382	0.1351	0.1073	0.1011	0.0838	0.0696	0.0677	0.0925	0.1217
306-365	11-12	0.2220	0.1979	0.1920	0.1705	0.1521	0.1342	0.1134	0.0938	0.0893	0.1121	0.0909
366-730	13-24	0.3632	0.3656	0.3515	0.3156	0.2856	0.2652	0.2380	0.2143	0.2394	0.2694	0.3658
731-1095	25-36	0.1863	0.2405	0.2306	0.2280	0.2100	0.2082	0.1971	0.1990	0.2176	0.2996	0.1484
1096-1460	37-48	0.1225	0.1623	0.1859	0.1826	0.1883	0.2032	0.1990	0.2163	0.2390	0.2656	0.0505
1461-1825	49-60	0.0662	0.0984	0.1191	0.1480	0.1645	0.1656	0.1936	0.2105	0.2357	0.1685	0.4901
1826-2190	61-72	0.0095	0.0321	0.0517	0.0390	0.0483	0.0669	0.0826	0.1164	0.1203	0.0728	0.6172
2191-2555	73-84	0.0046	0.0082	0.0150	0.0210	0.0302	0.0387	0.0692	0.0658	0.1501	0.0311	0.1295
2556-2920	85-96	0.0952	0.0022	0.0116	0.0169	0.0238	0.0334	0.0428	0.0713	0.0628	0.0436	0.1373
2921-3285	97-108	0.0067	0.0078	0.0134	0.0181	0.0266	0.0376	0.0671	0.0790	0.0705	0.0911	0.1454
3286-3650	109-120	0.1111	0.0070	0.0177	0.0315	0.0419	0.0573	0.0664	0.0736	0.0660	0.0675	0.1560

ATTACHMENT 4.4: CREDIT DISABILITY CONTINUANCE TABLE-ALL BUSINESS-ALL YEARS

2011 Intercompany Credit Disability Claim Termination Study											
Continuance Table Based on 1964 CDT 8-Day Incidence											
DUR.	22	27	32	37	42	47	52	57	62	67	72
Day 8	10807	10679	11604	12621	13721	14957	16384	18115	20162	22704	26014
15	10189	10044	10963	11984	13068	14298	15749	17522	19496	22094	25550
22	9477	9409	10346	11335	12388	13609	15053	16796	18842	21387	24944
31	8358	8410	9357	10314	11335	12539	13992	15752	17765	20167	24044
60	5619	5846	6631	7367	8174	9232	10683	12403	14229	16301	21376
90	4078	4353	5065	5769	6462	7352	8663	10256	11907	13669	19688
Mo 4	3086	3401	4072	4730	5377	6168	7321	8801	10316	11805	18456
5	2522	2823	3459	4109	4701	5443	6544	7937	9360	10623	17730
6	2116	2402	2991	3637	4186	4881	5926	7279	8635	9678	16881
8	1620	1871	2416	3051	3568	4203	5198	6515	7786	8525	14641
10	1352	1602	2082	2639	3185	3778	4763	6061	7258	7736	12860
Yr 1	1052	1285	1682	2189	2701	3271	4223	5492	6610	6869	11691
2	670	815	1091	1498	1930	2404	3218	4315	5028	5018	7415
3	545	619	839	1156	1524	1903	2583	3457	3934	3515	6315
4	478	519	683	945	1237	1517	2069	2709	2994	2581	5996
5	447	468	602	805	1034	1266	1669	2139	2288	2146	3057
6	442	453	571	774	984	1181	1531	1890	2013	1990	1170
7	440	449	562	758	954	1135	1425	1765	1711	1928	1019
8	398	448	556	745	931	1097	1364	1640	1603	1844	879
9	396	444	548	731	907	1056	1272	1510	1490	1676	751
10	352	441	539	708	869	995	1188	1399	1392	1563	634

ATTACHMENT 4.5: CREDIT INVOLUNTARY UNEMPLOYMENT RAW CLAIM TERMINATION RATES-ALL (MONTHLY AND NON-MONTHLY) BUSINESS–ALL YEARS

2011 Intercompany Credit Involuntary Unemployment Study – Raw Claim Termination Rates Based on Amount of Insurance Monthly and Non-Monthly Business – All Years											
Day	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**67**	**72**
8-14	0.0000	0.0015	0.0008	0.0006	0.0008	0.0016	0.0003	0.0012	0.0009	0.0000	0.0000
15-21	0.0004	0.0012	0.0007	0.0003	0.0019	0.0018	0.0005	0.0000	0.0000	0.0085	0.0000
22-30	0.0537	0.0489	0.0544	0.0456	0.0437	0.0466	0.0482	0.0429	0.0373	0.0788	0.0532
31-61	0.1045	0.1034	0.0982	0.1004	0.0930	0.0947	0.0795	0.0729	0.0610	0.0423	0.0246
62-91	0.1110	0.1164	0.1053	0.1010	0.1013	0.0996	0.0863	0.0814	0.0633	0.0481	0.0380
92-122	0.1360	0.1153	0.1139	0.1106	0.1085	0.1072	0.0875	0.0797	0.0587	0.0539	0.0454
123-152	0.1376	0.1275	0.1111	0.1058	0.1014	0.0993	0.0800	0.0783	0.0684	0.0601	0.0424
153-183	0.2031	0.2094	0.1955	0.1861	0.1747	0.1712	0.1350	0.1275	0.1287	0.0928	0.0795
184-244	0.2683	0.2709	0.2509	0.2454	0.2359	0.2366	0.2125	0.2135	0.1854	0.1382	0.1554
245-305	0.1762	0.1709	0.1815	0.1734	0.1734	0.1621	0.1579	0.1502	0.1286	0.1239	0.1315
306-365	0.2187	0.2236	0.2253	0.2213	0.2244	0.2337	0.2347	0.2387	0.2471	0.2860	0.2970
366-730	0.0984	0.0803	0.0778	0.0843	0.1022	0.1029	0.1000	0.0841	0.1046	0.1253	0.1412
731-1095	0.0053	0.0017	0.0023	0.0026	0.0018	0.0026	0.0034	0.0032	0.0039	0.0000	0.0125
1096-1460	0.0277	0.0043	0.0146	0.0013	0.0007	0.0034	0.0024	0.0025	0.0012	0.0000	0.0000
1461-1825	0.0053	0.0101	0.0527	0.0327	0.0155	0.0186	0.0178	0.0186	0.0180	0.0000	0.0000
1826-2190	0.0000	0.0000	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

ATTACHMENT 4.6: CREDIT INVOLUNTARY UNEMPLOYMENT MANUALLY SMOOTHED CLAIM TERMINATION RATES

ALL (MONTHLY AND NON-MONTHLY) BUSINESS–ALL YEARS 2011 Intercompany Credit Involuntary Unemployment Study Adjusted Claim Termination Rates												
Day	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**67**	**72**	**Weighted**
8-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-30	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
31-61	0.10	0.10	0.10	0.10	0.09	0.09	0.08	0.07	0.06	0.04	0.02	0.09
62-91	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.08	0.06	0.05	0.04	0.10
92-122	0.14	0.12	0.11	0.11	0.11	0.11	0.09	0.08	0.06	0.05	0.05	0.10
123-152	0.14	0.13	0.11	0.11	0.10	0.10	0.08	0.08	0.07	0.06	0.04	0.10
153-183	0.20	0.20	0.20	0.19	0.17	0.15	0.13	0.13	0.13	0.09	0.08	0.16
184-244	0.27	0.27	0.25	0.25	0.24	0.24	0.21	0.21	0.19	0.14	0.14	0.23
245-305	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.15	0.13	0.12	0.12	0.16
306-365	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.24	0.25	0.29	0.30	0.23
366-730	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.13	0.14	0.10

Age	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**67**	**72**	**Total**
Exposure-31st Day	1,182,148	2,617,918	3,563,033	4,219,986	4,959,121	5,871,077	4,536,925	3,209,213	1,563,685	407,972	163,389	32,294,467

ATTACHMENT 4.7: CREDIT INVOLUNTARY UNEMPLOYMENT RAW CLAIM TERMINATION RATES-MONTHLY BUSINESS ONLY-ALL YEARS

2011 Intercompany Credit Unemployment Study Raw Claim Termination Rates – Monthly Business Only – All Years											
Day	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**67**	**72**
22-30	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
31-61	0.04	0.02	0.07	0.04	0.03	0.03	0.02	0.01	0.01	0.00	0.00
62-91	0.05	0.05	0.04	0.02	0.03	0.03	0.01	0.01	0.02	0.01	0.05
92-122	0.08	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.00	0.00	0.00
123-152	0.03	0.05	0.02	0.02	0.02	0.03	0.01	0.02	0.03	0.01	0.00
153-183	0.03	0.05	0.08	0.05	0.05	0.04	0.03	0.03	0.02	0.00	0.06
184-244	0.07	0.05	0.07	0.05	0.03	0.04	0.04	0.05	0.03	0.03	0.12
245-305	0.05	0.04	0.03	0.03	0.03	0.05	0.03	0.03	0.05	0.04	0.08
306-365	0.05	0.04	0.06	0.06	0.04	0.06	0.04	0.04	0.05	0.04	0.11
366-730	0.00	0.02	0.00	0.02	0.01	0.03	0.03	0.03	0.04	0.05	0.00

ATTACHMENT 4.8: CREDIT INVOLUNTARY UNEMPLOYMENT MANUALLY SMOOTHED CLAIM TERMINATION RATES

MONTHLY BUSINESS ONLY-ALL YEARS

2011 Intercompany Credit Unemployment Study Adjusted Claim Termination Rates – Monthly Business Only												
Day	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**67**	**72**	**Weighted**
22-30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31-61	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.02
62-91	0.05	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.03
92-122	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.02
123-152	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02
153-183	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.01	0.01	0.04
184-244	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.04
245-305	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.03
306-365	0.05	0.05	0.06	0.06	0.06	0.06	0.04	0.04	0.04	0.04	0.04	0.05
366-730	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.05	0.05	0.03

Age	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**67**	**72**	**Total**
Exposure-31st Day	34,650	93,355	177,136	235,407	299,198	362,164	416,995	320,499	198,293	48,770	18,821	2,205,287

*ATTACHMENT 5.1: DISABILITY CLAIM RESERVES FOR ILLUSTRATIVE CLAIM**

		Credit Disability			
		Claim Reserve		Actual Exposure (Mo Indemnities)	
		All Years	Recession 2009-11	All Years	Recession 2009-11
All Business		834.61	861.85	417,833,214.52	64,698,858.39
Cause	Accident	775.82	739.78	92,639,679.19	15,529,144.73
	Sickness	810.52	842.36	241,680,720.25	39,724,259.85
	Unknown	965.32	1,133.59	82,800,027.97	9,432,217.43
Gender	Female	813.24	819.09	151,503,317.72	24,701,394.12
	Male	846.37	850.59	236,917,957.48	37,594,149.76
	Unknown	851.50	1,470.55	29,410,276.53	2,403,314.51
Waiting Period	3 Days	664.95	617.70	3,461,997.11	840,668.15
	7 Days	1,111.59	1,082.42	28,155,651.37	4,813,926.84
	14 Days	818.58	834.38	211,706,132.07	36,583,127.71
	30 Days	803.27	861.35	171,728,768.17	22,389,194.21
	90 Days				
	Unknown			35,837.65	35,368.70
Retroactive	Non-Retro	751.85	784.23	154,393,065.62	20,398,232.18
	Retro	851.49	869.39	244,351,710.63	41,086,888.43
	Unknown	1,352.88	1,272.81	19,088,438.28	3,213,737.79
Premium	Monthly	734.25	785.15	227,607,544.09	37,152,411.09
	Single	943.13	913.94	188,421,508.43	26,508,287.28
Source	Auto	815.02	718.94	27,214,217.35	4,336,124.39
	Bank	855.62	763.27	38,607,203.97	4,768,007.43
	Credit Union	709.37	741.46	256,637,574.26	38,339,391.66
	Finance	1,166.67	1,144.94	89,109,113.76	15,352,812.64
	Retail	830.68	941.53	2,010,709.73	695,503.56
	Unknown	1,573.32	1,967.89	4,254,395.46	1,207,018.70
Sales	Direct Mail				
	Internet				
	Other Post-POS				
	Point of Sale	1,004.42	964.75	179,760,553.10	26,126,145.34
	Telephone			239,483.10	208,671.89
	Unknown	706.10	778.53	237,833,178.32	38,364,041.16
Loan Type	Credit Card	896.58	1,177.94	2,339,377.45	30,594.38
	Mortgage	762.95	744.39	1,543,968.64	447,795.81
	HELOC	710.11	715.08	6,138,012.75	1,557,376.78
	Installment	789.36	760.30	140,947,868.70	27,978,859.28
	Other Revolving	725.69	632.21	4,403,646.37	202,589.48
	Second Mortgage	718.22	688.82	2,527,514.98	679,349.65
	Other	863.66	951.14	259,932,825.61	33,202,293.01

Claim Reserve Factors as of the 31st day, reflecting a two-year maximum benefit period (per $100 Monthly Indemnity)

*ATTACHMENT 5.2: UNEMPLOYMENT CLAIM RESERVES FOR ILLUSTRATIVE CLAIM **

		Credit Involuntary Unemployment			
		Claim Reserve		Exposure	
		All Years	Recession 2009-11	All Years	Recession 2009-11
All Business		664.98	699.37	32,294,466.77	12,113,396.42
Gender	Female	689.30	712.93	11,860,406.28	3,736,222.26
	Male	642.59	666.64	18,560,759.00	7,255,607.42
	Unknown	726.71	856.45	1,872,781.01	1,121,566.74
Waiting Period	3 Days				
	7 Days				
	14 Days				
	30 Days	682.88	724.18	29,052,932.97	10,711,773.34
	90 Days				
	Unknown			11,335.92	9,222.46
Retroactive	Non-Retro	549.30	559.02	5,391,623.02	2,645,341.34
	Retro	579.43	634.20	6,071,765.86	3,327,079.72
	Unknown	711.31	780.66	20,831,077.90	6,140,975.37
Premium	Monthly	968.63	954.03	2,205,287.37	1,378,665.30
	Single	637.02	657.19	29,907,004.64	10,555,524.25
Source	Auto	433.38	439.38	702,575.78	395,749.75
	Bank	808.18	898.12	806,113.27	492,727.82
	Credit Union	512.42	522.71	12,617.59	7,674.26
	Finance	660.50	689.81	29,385,269.66	10,352,303.60
	Retail	772.77	817.20	798,273.67	601,497.51
	Unknown	793.59		589,616.80	263,443.45
Sales	Direct Mail				
	Internet				
	Other Post-POS				
	Point of Sale	652.28	672.19	31,141,715.79	11,074,455.60
	Telephone			670,591.58	634,288.92
	Unknown			482,159.40	404,651.91
Loan Type	Credit Card			670,591.58	634,288.92
	Mortgage				
	HELOC				
	Installment	544.42	572.82	5,250,675.31	2,769,985.92
	Other Revolving	623.61		8,673.42	697.00
	Second Mortgage	687.35		354,831.66	36,984.16
	Other	673.32	706.04	26,009,694.80	8,671,440.42

Claim Reserve Factors as of the 31st day, reflecting a one-year maximum benefit period (per $100 Monthly Indemnity)