

# SAS® GLOBALFORUM 2015

The Journey Is Yours

## Building Credit Modeling Dashboards

FI•CONSULTING



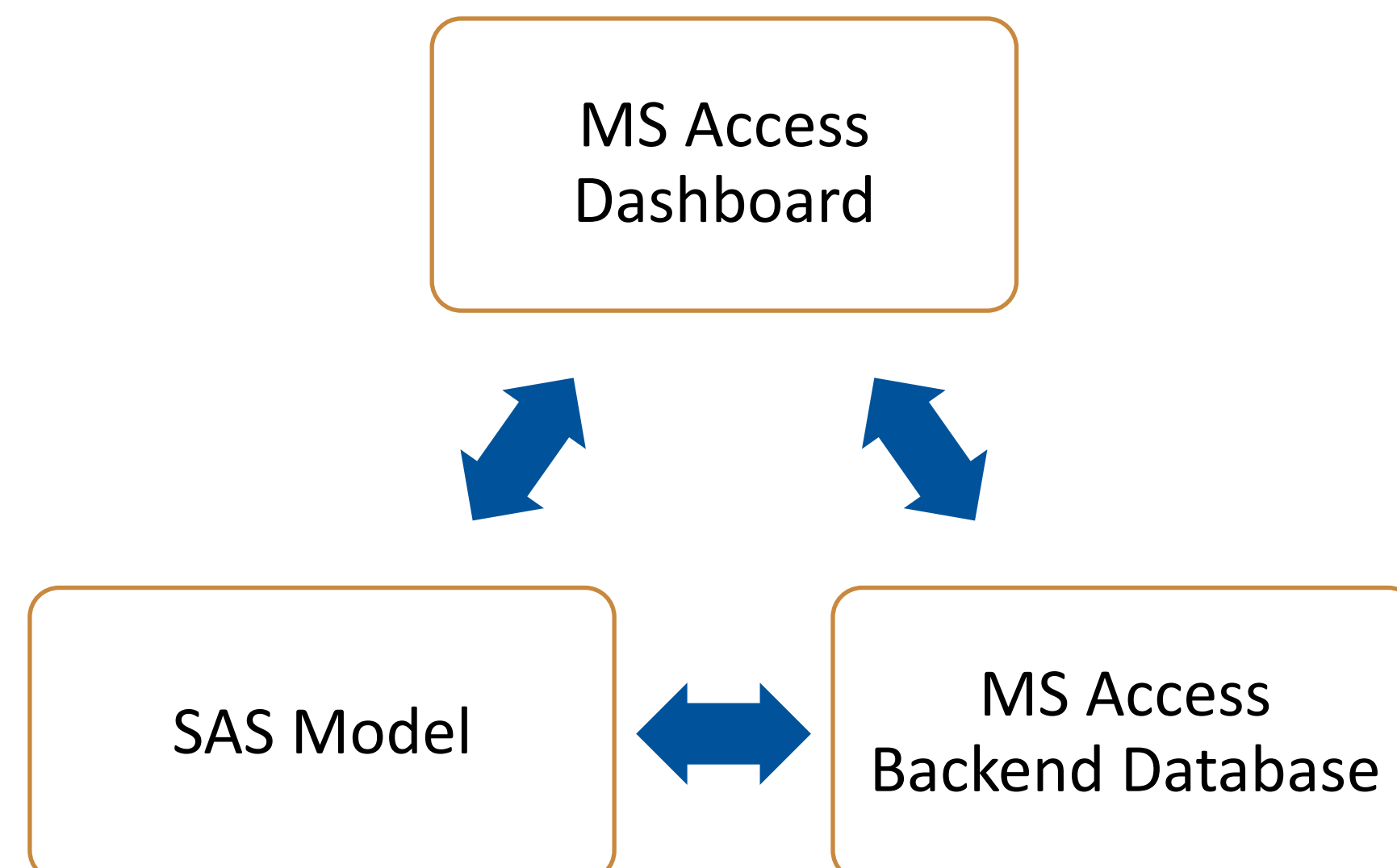


## Goals for Tool

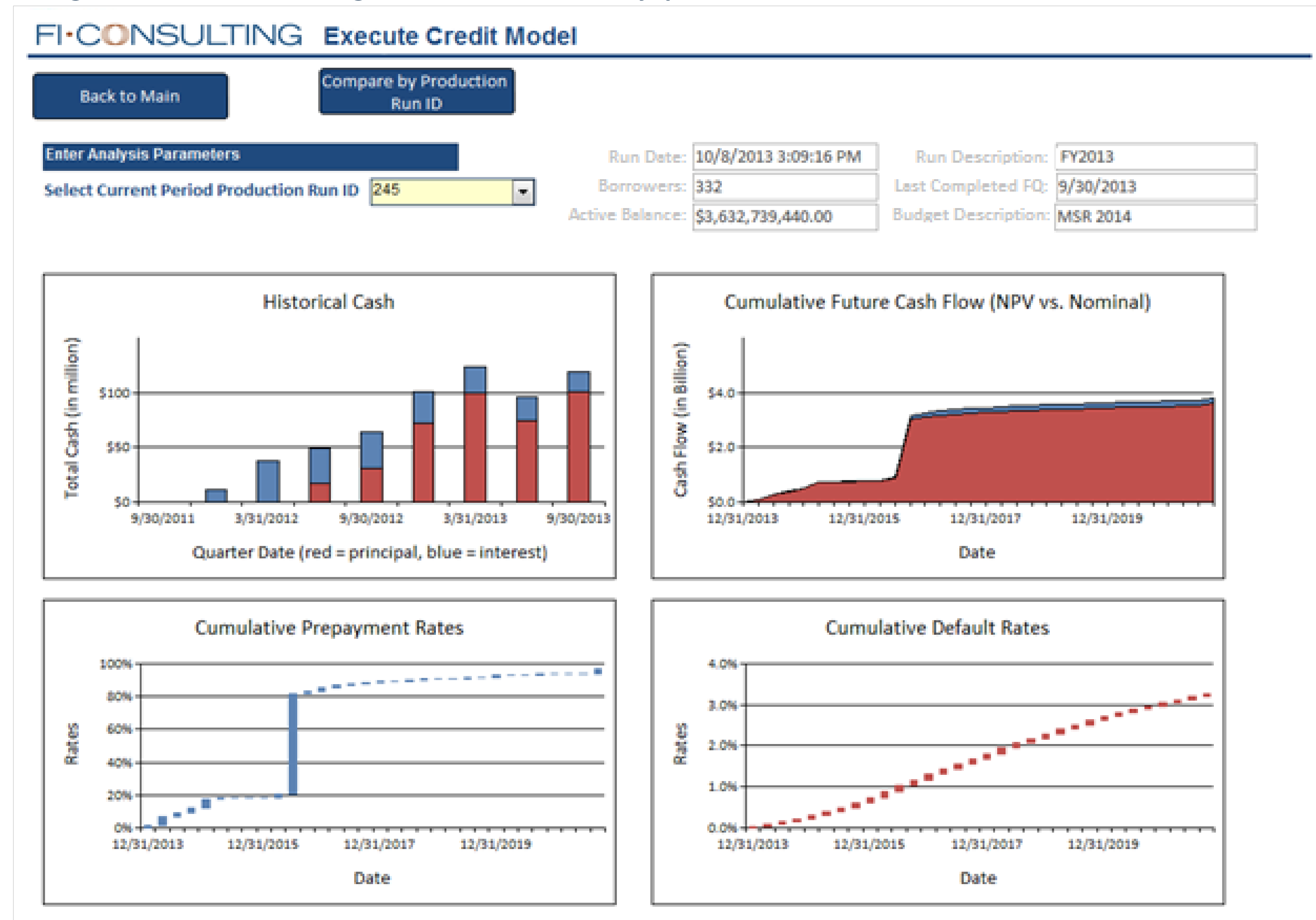
- Tool for managers and end-users to view SAS models in a more familiar format (MS Office)
- Provide a high impact, lightweight tool for organizing model results
- Reduce operational risk through improved version control
- Easily compare results after changes to model
- Efficiently compare model results over time

## Integrated solution:

- Access front-end dashboard executes SAS model in batch mode
- SAS model results are written to backend database
- Access backend database provides linkage between components and stores historical model results
- Access front-end then displays results created by SAS and allows easy recollection of historical model results



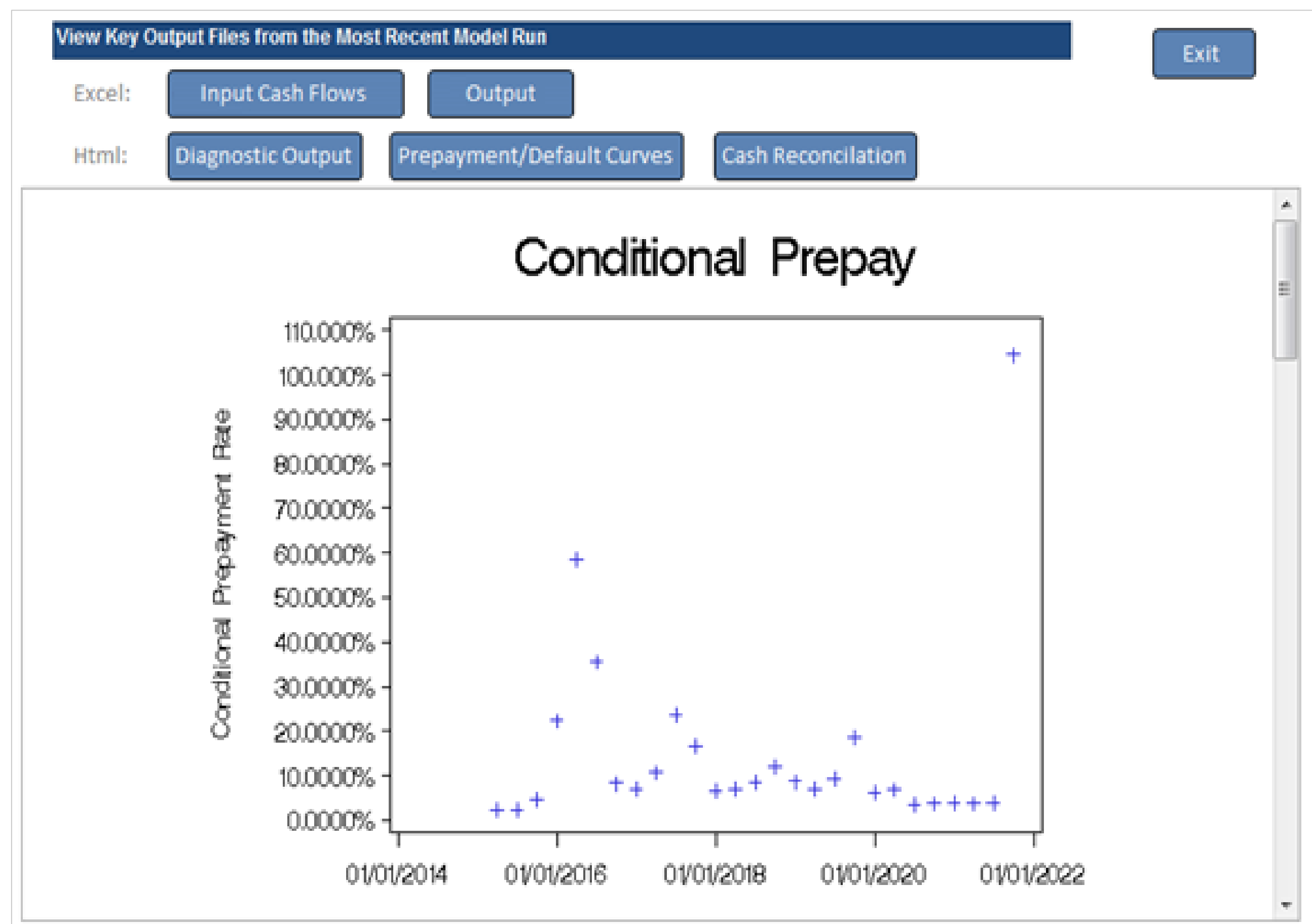
## Integrated credit modeling dashboard in an easy, point-and-click interface



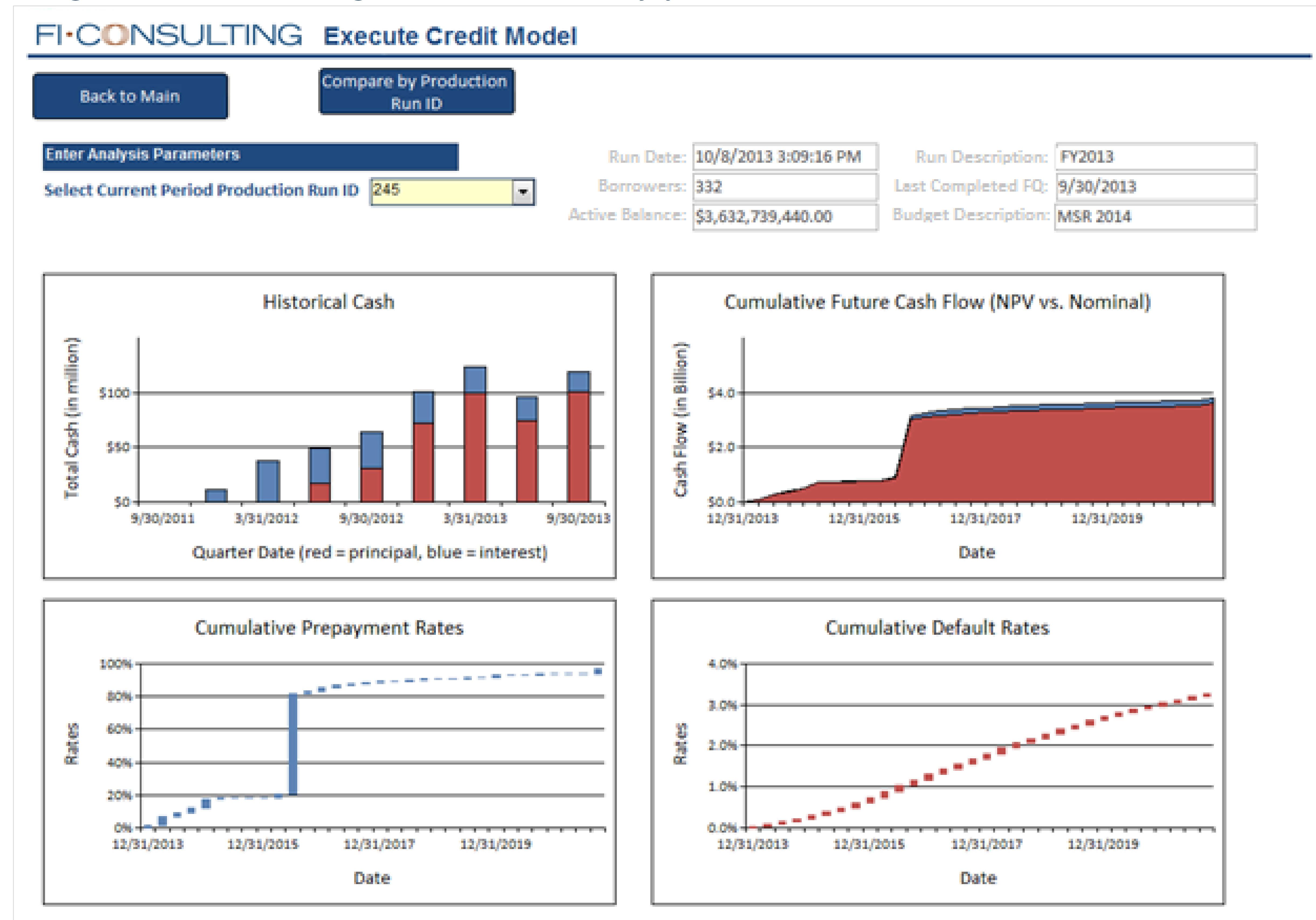
## Valuation Analytics

- Data Visualization
- Model Governance
- Creates graphs in familiar MS Office format
- Summarizes key portfolio performance metrics
- Allows user to select and compare prior model runs by run ID
- Easy export of SAS results to Excel

## Integrates SAS HTML Graphics



## Integrated credit modeling dashboard in an easy, point-and-click interface





SAS Model Configuration File (Execution)

- Easily filled form for SAS model parameters, file paths, and version control information.
- Interface used in place of users scrolling through control module of code in SAS Base.
- SAS model directly executed from form
  - The dashboard will use a shell function and run the SAS model in batch mode
- View results from prior model runs

Interface for updating link to backend database

- Allows easy update and selection of tool

Convenient form-based interface for entering model parameters and executing code

FI-CONSULTING Execute Credit Model

Enter the Location of the SAS.EXE Application

Browse for SAS.EXE Application

Enter the location of the SAS Model Control Sheet

Browse for SAS Model Control Sheet

Execute Model

Back to Main

Enter location of the the Excel.EXE Application

Browse for Excel.EXE Application

View Key Output Files from the Most Recent Model Run

View Output Files (Pop Up)

Enter Model Run-Time Parameters

Enter Run Description

test

Enter Run Suffix

test

Run Prepare Instrument? (Yes = 1, No = 0)

1

Run Prepare Coefficients? (Yes = 1, No = 0)

1

Run Model and Produce CSC2 Cash Flows? (Yes = 1, No = 0)

1

Run Sensitivity Analysis? (Yes = 1, No = 0)

0

Enter Production RunID (Enter 0 for new runs)

0

Enter Execution Dates and Shared Valuation Parameters

Enter Date Filter

5/31/2014

Enter Common Stock Begin Date

5/31/2013

Enter Common Stock End Date

5/31/2014

Enter Model Execution Month

6

Enter Model Execution Year

2014

Enter rate adjustment factor

1.53754820936639

Investment SubLedger Report Name:

rptInvestSubLedger\_06-04-14

Cash SubLedger Report Name:

rptCashSubLedger\_06-04-14

Enter Other Model Input AssumptionSetIDs

Enter budget Rate Set ID

7

Enter the Disbursement Assumption Set ID

7

Enter the Transaction Assumption Set ID

1

Enter the Historical Assumption Set ID

1

Enter the Dividend Override Curve ID (default is 0)

0

FI-CONSULTING Execute Credit Model

Generate SAS Model Configuration File

Valuation Analytics

Import Source Credit Model Backend Database:

Browse

Import Credit Model Backend Data

Clear Credit Model Interim Tables

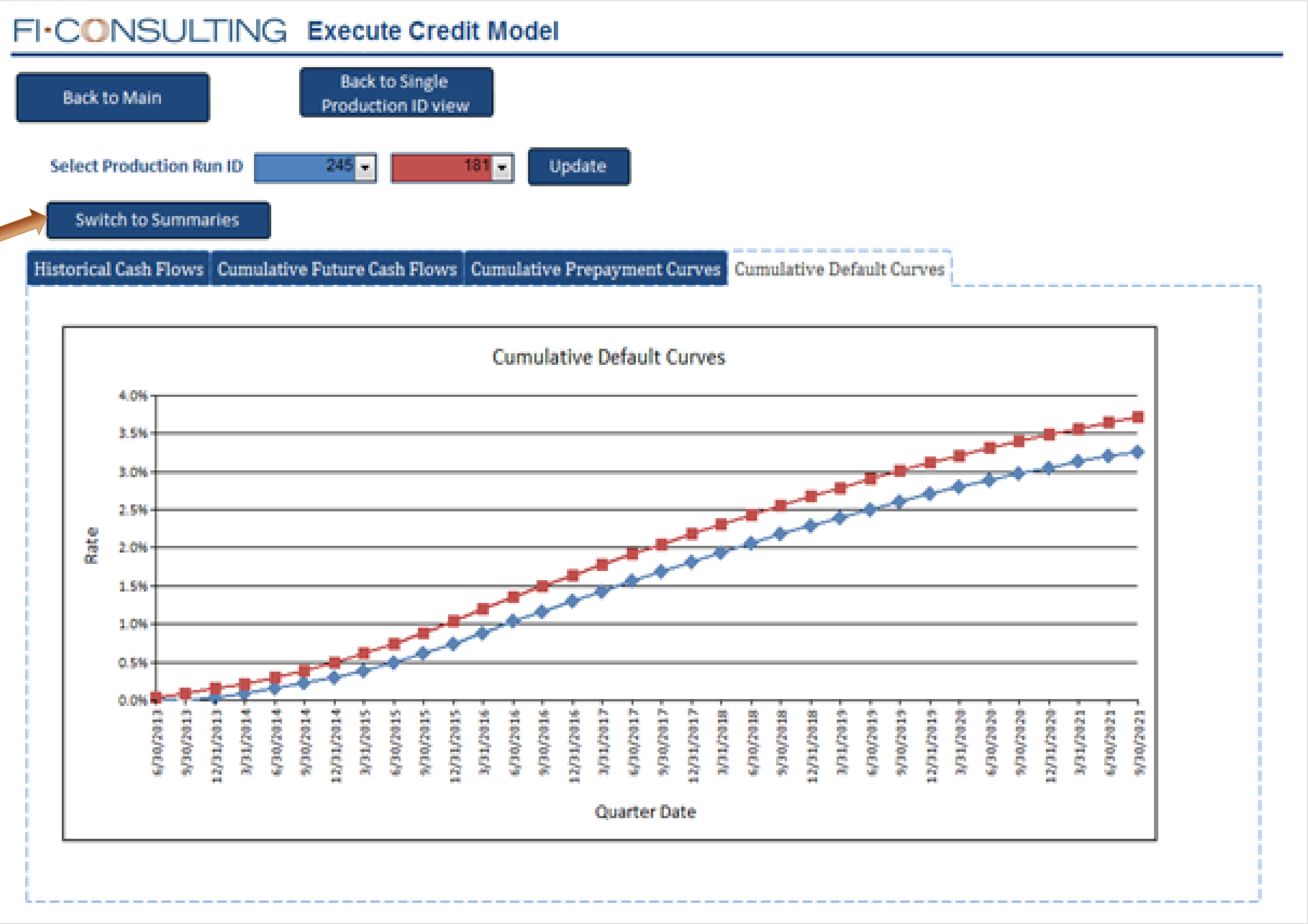


Visualization Tools

- Model governance and version control
- Each time model is executed, a unique identifier is given
- Tool allows us to recall SAS results from prior runs by ID
  - Allows better analysis of model over time
  - Assists in model development
  - Improves auditability

Switch from Chart to Summary Table

Easy point-and-click tool for comparing results across model runs







Visualization Tools

- Model governance and version control
- Each time model is executed, a unique identifier is given
- Tool allows us to recall SAS results from prior runs by ID
  - Allows better analysis of model over time
  - Assists in model development
  - Improves auditability

Customized for Credit Analysis...Generalizable to Other Applications

Easy point-and-click tool for comparing results across model runs

FI-CONSULTING

Execute Credit Model

Back to Main

Back to Single Production ID view

Select Production Run ID

245

181

Update

Switch to Charts

Production Run Parameters

Total Costs

Total Reestimate

Outstanding Balance by Borrower

	Nominal Quarterly Cash	Nominal Annual Cash	Total Interest	Cash EOP	NPV Future CF	Total Reestimate
Production Run ID: 181						
Last Completed FQ	\$223,749,735.36	(\$4,034,146,089.35)	(\$40,444,317.88)	(\$3,850,840,671.67)	\$3,794,369,314.90	\$56,471,356.97
*	\$494,920,602.46	(\$4,000,467,611.08)	(\$78,330,227.38)	(\$3,583,877,236.00)	\$3,561,311,079.70	\$22,566,156.30
**	\$494,920,602.46	(\$4,034,146,089.35)	(\$79,146,816.31)	(\$3,618,372,305.19)	\$3,561,311,079.70	\$57,061,225.49
Production Run ID: 245						
Last Completed FQ	\$439,668,697.76	(\$4,000,467,611.08)	(\$78,330,227.38)	(\$3,639,129,140.70)	\$3,605,536,402.31	\$33,592,738.39
*	\$439,668,697.76	(\$4,000,467,611.08)	(\$78,330,227.38)	(\$3,639,129,140.70)	\$3,605,536,402.31	\$33,592,738.39
**	\$439,668,697.76	(\$4,034,146,089.35)	(\$79,036,320.65)	(\$3,673,513,712.24)	\$3,605,536,402.31	\$67,977,309.93

\* includes actual annual transactions through the end of current FY, if available

\*\* includes projected annual transactions through the end of current FY





April 26-29  
Dallas, TX

