Oracle Financial Services Credit Risk Analytics

User Guide

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ORACLE Financial Services



OFS Credit Risk Analytics User Guide

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Document Control

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1 Preface

Welcome to release 8.1.0.0.0 of the Oracle Financial Services Credit Risk Analytics User Guide. This section provides a brief description of the scope, intended audience, related information sources, the organization of the user guide, and abbreviations used in the user guide.

Topics:

- Scope of the Guide
- Intended Audience
- What is new In This release
- <u>Access to Oracle Support</u>
- <u>Related Information Sources</u>
- <u>Conventions and Acronyms</u>

1.1 Scope of the Guide

Oracle Financial Services Credit Risk Analytics (OFS CRA) User Guide, Release v8.1.0.0.0, contains all the essential information required by a user to understand and use the user interface and functionalities in the application. It includes a description of the system functions and capabilities and details the step-by-step process for system access and use.

1.2 Intended Audience

This manual is intended for the following audience:

- Senior Executives and Managers: This user is responsible for credit risk management of their Line of Business and overall organization. They constantly monitor credit risk and are actively involved in decision and policy making aimed at managing and mitigating credit risks.
- Business Users: This user reviews the functional requirements and information sources, such as reports.
- Data Analysts: This user is involved with cleaning, validating, and importing data into the OFSAA Download Specification Format.
- Technical Analysts: This user ensures that the data is populated in the relevant tables as per the specifications and executes, schedules, and monitors the execution of Runs.

1.3 What is New in this Release

The Oracle Financial Services Credit Risk Analytics Release v8.1.0.0.7 is an enhancement of the existing Oracle Financial Services Credit Risk Analytics Release v8.1.0.0.3.

Following are the new features introduced in this release:

- Added new variables in the setup tables.
- Added two new batch in batch executions:
 - Instrument Data (<INFODOM>_CRA_BI_POPULATION)

- Customer Data (<INFODOM>_CRA_MAPPER_CUSTOMER_POP)
- New drill-down reports are introduced in the Enterprise Credit Risk (ECR), Wholesale Credit Risk (WCR), and Retail Credit Risk (RCR) reports.
- New measures are added at the graph level to filter the data.
- Few reports are removed and merged with existing reports in the Credit Risk Trading Book (Derivatives) reports.
- Top x and group x reports display data from obligor level to individual account level.
- New business is added for GCE composition in WCR, the GCR in ECR.
- New reports are populated to map to Obligor ID.

1.4 Installing this Major Release

For detailed instructions to install this Major Release, see the <u>Oracle Financial Services Credit Risk</u> <u>Analytics Installation Guide Release 8.1.0.0.0</u>.

1.5 Access to Oracle Support

Oracle customers have access to electronic support through <u>My Oracle Support</u>.

For information, visit: <u>http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info</u> Or visit <u>http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs</u> if you are hearing impaired.

1.6 Related Information Sources

You can access the following documents online from the Oracle Help Center (OHC) Documentation Library for <u>OFS CRA 8.1</u>:

- OFS Credit Risk Analytics Release Notes. Release 8.1.0.0.0
- OFS Credit Risk Analytics Installation Guide, Release 8.1.0.0.0

You can access the OFS AAI documentation online from the documentation library for OFS AAAI 8.x:

- OFS Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack Installation and Configuration Guide
- OFS Analytical Applications Infrastructure User Guide

The additional documents are:

- OFS Analytical Applications Infrastructure Security Guide
- OFS Analytical Applications 8.1.0.0.0 Technology Matrix

1.7 Conventions and Acronyms

The following table describes the conventions used in this document.

Table 1: Document Conventions

Convention	Meaning
Boldface	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
Italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
Monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, file names, text that appears on the screen, or text that you enter.
<u>Hyperlink</u>	Hyperlink type indicates the links to external websites, internal document links to sections.

The following table lists the abbreviations used in this document.

Table 2: Abbreviations

Abbreviation	Meaning
ALM	Asset and Liability Management
CRA	Credit Risk Analytics
DM	Data Model
EOD	End of Day
EOP	End of Period
MoM	Month-on-Month
MRMM	Market Risk Measurement and Management
MTD	Month-To-Date
NPA	Non-Performing Assets
OFSAA	Oracle Financial Services Analytical Applications
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
QoQ	Quarter- on -Quarter
QTD	Quarter To Date
RTD	Last Reporting-To-Date
YoY	Year-on Year
YTD	Year To Date

2 Introduction to Credit Risk Analytics

OFS CRA empowers financial institutions to proactively identify, measure, and mitigate enterprise wide credit risk though its comprehensive, dynamic, and high-quality reports. The application helps gain a holistic enterprise-wide view of credit risk present across the banking and trading book. It also enables financial institutions to mitigate credit and compliance costs by proactively identifying stressed pockets, credit concentrations, undifferentiated credit expansions, provisioning, and capital shortfalls and so on, and realigning their Credit, Non-performing Assets (NPA), Provisioning, and Capital Management Policy.

The application is packaged with Prebuilt Infographic Reports and Dashboards using Oracle Business Intelligence Enterprise Edition (OBIEE), which also offers enhanced flexibility to customize these prebuilt reports through the inbuilt Visual Analyzer. OFS CRA is a one-stop solution crafted to adequately address the Credit Risk Management challenges faced by all categories of financial institutions.

OFS Credit Risk Management has the following key components:

- Enterprise Credit Risk: Provides an enterprise wise view of credit risk across the banking and trading book.
- Wholesale Credit Risk: Provides an in-depth analysis of credit risk present in the wholesale book of the enterprise.
- **Counterparty Credit Risk**: Provides a detailed analysis of the credit risk and counterparty credit risk present in the trading book of the enterprise.
- **Retail Credit Risk**: Provides a detailed analysis of the credit risk in retail lines of business and related products.

Topics:

- Process Flow
- Logging into OFS CRA

2.1 **Process Flow**

The following illustration shows the process flow of the OFS CRA solution.





The following points describes the process flow:

- **Input Data Requirement**: In this layer, the required data must be loaded into the setup tables and stage tables.
- **Data Mapping**: In this layer, the application plots the processed data into data that can be readily consumed by OFS Credit Risk Analytics.
- **Processing**: In this layer, data is transferred from the input tables to the processing tables by Run execution.
- **Reporting Layer**: This makes up the OFS Credit Risk Analytics component. CRA has predefined reports to view and analyze data and results. Reports can be viewed in a user-friendly format using the Oracle Business Intelligence Enterprise Edition components. The reports are presented in multiple dashboards that can be modified as per the specific requirements.

2.2 Logging into OFS CRA Application

To log in to the OFS CRA Application, follow these steps:

Figure 2: OFS CRA Application Navigation



- 1. Access the OFS CRA application using the login credentials (**User ID** and **Password**) provided and select the preferred language to navigate. The built-in security system ensures that you are only permitted to access the window and actions based on the authorization.
- 2. After logging in to OFSAA Home screen, the landing page is displayed.

Figure 3: Illustration of the Icons in OFSAA Landing Page Header

Navigation menu icon	Header	Application icon Administration icon Language Selection menu
CRACLE' Financial Services Analytical Applications		US-English VUS-English CRABILUT REAL User Selection menu Connected To icon Last Login details icon

Use the information provided in the following table to set the application preferences.

Field	Description
User Menu	Click this drop-down list to select the Preferences , About , Change Password , or Logout options.
Application Icon	Click this icon to view all the applications installed in your environment. Click the icon and select Financial Services Credit Risk Analytics .
Language Menu US-English 💌	This menu displays the language you selected in the OFSAA Login Window. The language options displayed in the Language Menu are based on the language packs installed in your OFSAA Instance. Using this menu, you can change the language at any point in time.
Administration Icon 🗟	Click this icon to navigate to the Administration Window. The Administration Window displays modules such as Object Administration, Utilities, and Process Modelling Framework .
Last Login Details 🔯	Click this icon to view the details of the last login and last failed login.
Object Administration	Object Administration is an integral part of the infrastructure and facilitates System Administrators to define the Security Framework. See the <u>OFS</u> <u>Advanced Analytics Infrastructure User Guide</u> for details.
Common Object Maintenance	Common Object Maintenance is an integral part of the Infrastructure System and facilitates System Administrators to define the Security Framework with the capacity to restrict access to the data and metadata in the warehouse, based on a flexible, fine-grained access control mechanism. See the <u>OFS</u> <u>Advanced Analytics Infrastructure User Guide</u> for details.

Table 3: Icons in the OFSAA Landing Page Masthead and Their Descriptions

- 3. Select OFS Credit Risk Analytics on the OFSAA Landing page.
- **4.** Select **Credit Risk Analytics** in the Left-Hand Side (LHS) pane. The **Credit Risk Analytics** landing page is displayed.

3 Input Data Preparation

The data required to be updated in the setup tables of the OFS Credit Risk Analytics application is detailed in this section.

Topics:

- <u>Setup Tables</u>
- Batch Execution

3.1 Setup Tables

A Setup Table is a set of Seeded Data that is static and does not change at regular intervals.

You must update the SETUP_MASTER table with the required data. During the Dimension Population Process, the SETUP_MASTER table is accessed by the Slowly Changing Dimension (SCD) Component. The following table lists the variables and their descriptions.

Variable Name	Variable Description	Variable Dummy Value
CRA_FISCAL_MONTH	Stores the Fiscal Month in DD/MM format.	01/04
DEFAULT_GAAP	Stores the default GAAP code.	USGAAP
DEFAULT_FX_RATE_SRC	Stores the default Foreign Exchange Rate source code.	DEFAULT
CRA_REP_CCY	Stores the Reporting Currency.	-1
CRA_LLFP	Stores the LLFP Run Skey.	-1
RA_STD_CCY_CD	Stores the Standard Currency used in currency conversion.	USD
CRA_MRMM	Stores the CRA MRMM Execution details.	-1
CRA_REGCAP	Stores the CRA Basel Execution details.	-1
CRA_ALM	Stores the ALM Execution details.	-1
CRA_CASHFLOW_PROCESS_ID_LIST	Stores the list of ALM Cash Flow Process ID.	-1
CRA_STANDARD_PROD_EXCLUSION	Excludes comma separated values of V_STANDARD_PRODUCT_TYPE_CODE while loading data in to the FCT_CREDITRISK_ACCOUNT_SUMMARY table.	EQ
CRA_LOAN_EXP_STD_PROD	Considers comma separated values of V_STANDARD_PRODUCT_TYPE_CODE for loan exposure computation	PCFC, PERLOANS, LOANS, CC, CSHCRED, LGS, DDL, SGUA, GURR, GUARANTEE, PC, SCPT, LCD, EDULNS, OD, LEASE

Table 4: Variables and Their Descriptions

Variable Name	Variable Description	Variable Dummy Value
CRA_INVESTMENT_EXP_STD_PROD	Considers comma separated values of V_STANDARD_PRODUCT_TYPE_CODE for investment exposure computation	CP, ZCB
CRA_DERIVATIVE_EXP_STD_PROD	Considers comma separated values of V_STANDARD_PRODUCT_TYPE_CODE for derivative exposure computation	CFUT, FDS, SWPS, OPT
CRA _STANDARD_PROD_EXCLUSION	Excludes comma separated values of V_STANDARD_PRODUCT_TYPE_CODE while loading data in to the FCT_CREDITRISK_ACCOUNT_SUMMARY table.	EQ
CRA_STATS_PARALLEL_DOP	CRA_STATS_PARALLEL_DOP	8
DT_PARALLEL_DOP	Degree of parallelism to be used in DML and Queries statements in data transformations	2
DT_PARALLEL_ENABLE	Enables parallel sessions for DML and Queries statements in data transformations	Y
GATHER_TABLE_STATS	If the value is set to Y then process will gather table stats	Ν

OFS CRA application provides the capability of reporting figures from other applications such as OFS Loan Loss Forecasting and Provisioning (LLFP), OFS Market Risk Measurement and Management (MRMM), OFS Asset and Liability Management (ALM), and OFS Basel Regulatory Capital. If the LLFP MRMM, ALM, and Basel Regulatory Capital implemented by the financial institution are from an external vendor, then you must manually populate the relevant target tables in the OFS CRA application.

The following table lists the target tables to be populated.

Table 5: Target Tables to be Populated

Target Tables	Application Name
FCT_LLFP_ACCOUNT_SUMMARY	Loan Loss Forecasting and Provisioning
FCT_MR_PFE_GROUP_OUTPUT	Market Risk Measurement and Management
FCT_MR_PFE_TRADE_OUTPUT	Market Risk Measurement and Management
FCT_MR_MNTCRLO_SIM_EXEC_DTL	Market Risk Measurement and Management
FCT_CP_CVA_DETAILS	-
FCT_PROCESS_CASHFLOW	Asset and Liability Management
FCT_REG_CAP_ACCOUNT_SUMMARY	Basel Regulatory Capital

Stage tables are populated in product processors or other stage tables as listed in the Run Chart. Product Processor is an entity that stores data from the Operational Systems of the bank. This entity is created based on the various financial products that the bank caters to. A snapshot of the data is expected as a download in all the stage tables. The stage data moves to the processing (fact) tables through Table-to-Table transformations (T2Ts).

The following are the main Fact Tables for OFS Credit Risk Analytics, which store all the download values:

- Fact Common Account Summary
- Fact Net Exposure
- Fact Counterparty product Type Summary

Any computed measures are stored in the Fact Credit Risk Account Summary Table.

Additionally, a counterparty and a product granularity table is populated with the downloaded values at the counterparty level and product type level. The computed measures are calculated considering the data from the Fact Credit Risk Account Summary Table and flows to the Fact Counterparty Product Type Summary Table. Any additional measures are computed and stored in these tables.

The type of data expected as a download in the Stage Tables is as follows:

• Account Granularity Data:

This input data is expected in the following Product Processor Tables:

- STG_BILLS_CONTRACTS
- STG_CARDS
- STG_GUARANTEES
- STG_INVESTMENTS
- STG_LC_CONTRACTS
- STG_LEASES_CONTRACTS
- STG_LOAN_CONTRACTS
- STG_MM_CONTRACTS
- STG_OD_ACCOUNTS
- STG_FUTURES
- STG_FX_CONTRACTS
- STG_OPTION_CONTRACTS
- STG_REPO_CONTRACTS
- STG_SWAPS_CONTRACTS
- STG_CREDIT_DERIVATIVES
- STG_FORWARDS

Customer Data

This input data is expected as a download in the following tables:

- Stage Party Master
- Stage Party Role Map
- Stage Party Type

- Stage Party Details
- Stage Rating Details

Data flows from the preceding tables to the corresponding dimension table, which is the:

- Dim Party table
- Dim Party Type
- Fact Party Details
- Fact Rating Details

• Rating Granularity Data

This input data is expected as a download in the Stage Party Rating Details Table which moves to the Fact Party Ratings Details Table.

• Mitigant Data

This input data is expected as a download in the Stage Mitigants Tables. Data flows from these Stage Tables to the Fact Mitigants Table.

Additionally, data flows from the Stage Account Mitigant Map Table to the Fact Account Mitigant Map Table. This Stage Table stores the mapping between the accounts and the respective mitigants.

• Exchange Rate Granularity Data

This input data is expected as a download in the Stage Forward Exchange Rates Table. From the Stage Table, data is populated to the FSI Exchange Rate Tables.

• Net Exposure

This input data is expected as a download in the Stage Net Exposure table. Data flows from this stage table to the Fact Net Exposure Table. The computed measures at the netting level from the Fact Net Exposure Table are stored in the Fact Credit Risk Account Summary Table at the account level granularity. The measures are aggregated at a product type, party and legal entity level and stored in the Fact Counterparty Product Summary Table.

3.2 Batch Execution

You must execute the individual batches for the Data Population. The batches are executed using the **Operations** Menu of the **Oracle Financial Services Analytical Applications Infrastructure** Application. See the <u>OFS Analytical Applications Infrastructure User Guide</u>, for more information on executing a batch.

The batches to be executed are as follows:

• **Dimension Table Population (<INFODOM>_CRA_DIMENSION_DATA_POP):** Dimension Table Population Process refers to the process of moving the dimension data from the processing Dimension Tables to the Common Reporting Dimension Tables shared by all of the OFSAA Business Intelligence (BI) Applications. The Dimension Table Population is handled by the

Slowly Changing Dimension (SCD) Process and the Data Transformations (DT) Process. SCDs are used to maintain the history of Dimension Member changes over time.

The Run Chart details the tasks executed when the dimension table population batch is executed. It also states the order in which the tasks are executed as mentioned in the Precedence Section of the Run Chart. See the OFS CRA Run Chart (**MOS Document ID**: <u>2017353.1</u>), for more details on the individual tasks executed. You must update this batch after installing the application. Later, if the data undergoes any change or new data is updated, then the relevant tasks must be updated.

- **Common Data Population (<INFODOM>_CRA_CAS_POP)**: This batch is executed to populate data from the Stage Product Processors to the Fact Common Account Summary (FCT_COMMON_ACCOUNT_SUMMARY) tables. The Fact Common Account Summary Table is a Common Fact Table used by all the Oracle Financial Services Analytical Applications. This is a T2T functionality and the order in which the tasks are executed is stated in the Run Chart. You must execute this batch for each MIS date. If there is any mismatch with the data then all the records for that MIS Date must be deleted and data must be loaded again.
- **CRA ALM Integration**: This batch is executed only when the OFS ALM Cash Flows are considered for OFS CRA. You must execute the following batches for successful CRA ALM Integration:
 - SCD2ALM2CRA2INTGRTION
 - ALM_CRA_Cashflows
- **Data Preparation (INFODOM_CRA_DATA_PREP)**: This ICC Batch is configured to contain party data tasks required for Enterprise Credit Risk Calculation. You must execute this batch whenever there is a change, or a new download is received for the tables listed under this batch.
- Exchange Rate (<INFODOM>_CRA_BATCHDAILY): This ICC Batch is configured to contain Party Data Tasks required for Enterprise Credit Risk Calculation. You must execute this batch to populate the FSI_EXCHANGE_RATES table.
- Instrument Data (<INFODOM>_CRA_SCDINSTRCONTRACT): Execute this task first time for the date for which data is available in the stage table (VW_STG_INSTRUMENT_CONTRACT). Ensure to execute this task, whenever data is modified, or new data is entered.
- **Reporting Table Population (<INFODOM>_CRA_BI_POPULATION):** Execute this Run to move the data from the CRA Fact Tables to the CRA Reporting Tables, based on the date.
- Customer Data (<INFODOM>_CRA_MAPPER_CUSTOMER_POP): Execute this batch to load data to the dim_customer table.

4 Data Mapping

Data Mapping creates a mapping between the source data elements and OFS Credit Risk Analytics Data Structure. When a Run is executed, the input data from the Staging Tables and the Dimension Tables are populated in the relevant Fact Tables in a sequence as mentioned in the Run Chart.

This section provides a high-level design of the Data Mapping Structure as per the tasks executed within a Run.

Topics:

- <u>Application Analysis</u>
- Exchange Rate Flow
- <u>Account Cash Flow Analysis</u>
- <u>Account Mitigant Analysis</u>
- <u>Counterparty Credit Risk Analysis</u>
- <u>Predicted Wholesale Transition Matrix Analysis</u>
- <u>Collections Analysis</u>

4.1 Application Analysis

The following is the data flow for Application Analysis.

Figure 4: Data Flow Application Analysis



4.2 Exchange Rate Flow

The following is the data flow for Exchange Rate Flow.

Figure 5: Data Flow Exchange Rate Flow



4.3 Account Cash Flow Analysis

The following is the data flow for Account Cash Flow Analysis.

Figure 6: Account Cash Flow Analysis



4.4 Account Mitigant Analysis

The following is the Data Flow for Account Mitigant Analysis.

Figure 7: Account Mitigant Analysis



4.5 Counterparty Credit Risk Analysis

The following is the data flow for Counterparty Credit Risk Analysis.

Figure 8: Counterparty Credit Risk Analysis



4.6 Predicted Wholesale Transition Matrix Analysis

The following is the data flow for Predicted Wholesale Transition Matrix Analysis.



Figure 9: Predicted Wholesale Transition Matrix Analysis

4.7 Collections Analysis

The following is the data flow for Collections Analysis.

Figure 10: Collections Analysis



5 CRA Processing

The OFS Credit Risk Analytics Application includes an Enterprise Run for data transfer from the Input Tables to the Processing Tables and deals with only the Asset Products of the Bank. The Enterprise Run must be executed on a monthly basis. Multiple Runs can be present for each of these Runs, but an indicator is present to identify the Reporting Run, from which data will be reported. You can update the Reporting Flag from the Run Execution Summary Screen.

The Reporting Run indicator is configured for reports which include trends over a period of time. If one of the previous Runs with the same Run ID has a Reporting Run Indicator with a different date, then data from this Run is used in displaying the trend reports.

NOTE Each Run will have a Single Reporting Currency.

5.1 Manage CRA Rules

Financial institutions require constant monitoring and measurement of risk to conform to prevalent Regulatory & Supervisory Standards. Such measurements often entails significant computations and validations with an organization's data. Data must be transformed to support such measurements and calculations. The data transformation is achieved through a set of defined Rules.

See the *Components of Rules Run Framework* Section in the <u>OFS Advanced Analytics Infrastructure</u> <u>User Guide</u> for details.

5.2 Run Management

The Run Management screen of the OFS CRA Application allows you to view and execute Runs.

5.2.1 Understanding Run Management Summary

In the Oracle Financial Services Analytical Applications Infrastructure Home Screen, select Financial Services Credit Risk Analytics.

To open the Run Management Window, select **Credit Risk Analytics**, and then select **Run Management** on the Left-Hand Side (LHS) Menu.

The Run Management Summary Page of the OFS CRA Application allows you to execute Run or Runs and view the Run Execution Summary.

Figure 11 Run Management Summary

	nancial Services Credit Risk Analytics				US-English 🔻	CRA81DEV 🔻 🕺 🕻
Run Management Summary						Θ
▲ Search						
Run Name Active	All T		Folde	er	v	0.2
Run Details						
Run name	Run Desc	Created By	Created Date	Modifed By	Modifed Date	Active
CRA_ENTERPRISE_RUN	CRA Enterprise Credit Risk	SYSADMN	08/11/2020			No
Credit_Risk_Run_V1	Credit Risk Analytics Run V1	SYSADMN	08/11/2020			Yes
CRA_ENTERPRISE_RUN_V2	CRA Enterprise Credit Risk V2	SYSADMN	08/11/2020			No
CRA_ENTERPRISE_RUN_V1	CRA Enterprise Credit Risk V1	SYSADMN	08/11/2020			No
CRA_COUNTERPARTY_RUN	Credit Risk Analytics - Counterparty Run	SYSADMN	08/11/2020			No
Page 1 of 1 (1-5 of 5 items)	< < 1 > >					

The Search Section contains multiple parameters. You can specify one or multiple Search Criteria in this section. When you click the search icon, depending upon the Search Criteria, the application filters and displays the relevant search combination parameters under the Run Management Summary as a list.

Search Field or Icon	Description
Search	This icon allows you to search the Run definition based on the search criteria specified. Search criteria include a combination of Run Name and Folder. The Run Definitions displayed in the Run Management Summary table are filtered based on the search criteria specified on the clicking of this icon.
Reset 🕫	This icon allows you to reset the Search Section to its default state that is, without any selections. Resetting the Search section displays all the existing Run Definitions in the Run Management Summary Table.
Run Name	Enter the Run Name. This field allows you to search the pre-defined Run based on the Run Name.
Folder	This field allows you to search for the pre-defined Run Definitions based on the selected folder. This field displays a list of folders that you have access to as a drop-down. The selection of a folder from the drop-down list displays only those Run Definitions that have been defined within the selected folder/segment in the Run Management Summary Table.
Active	This field enables you to view all the active Runs. Select Yes to view only the active Runs.

Table 6 Run Management – Fields and Descriptions

Runs Icon Name	lcon	Description
Run Execution Parameters	O⊧	This icon allows you to specify execution parameters and execute the Run from the Run Execution Parameters Screen. Select the checkbox against a Run Definition and click the Run Execution Parameters icon to view the Run Execution Parameter Specification Window.
Run Execution Summary	λe	This icon displays the Run Execution Summary Window. The Run Parameters specified as part of the Run Definition Window are displayed in an un-editable form in the Run Parameters Window. The entire list of executions and their details are displayed for the selected definition on this screen.

5.3 Run Execution Parameters

In the **Run Management Summary** window, select a Run from the list of Runs, and click **Execute** . The **Run Execution Parameters** window is displayed.

Figure 12: Run Execution Parameters Window

Run Execution				×
▲ Linked To				
Folder	CRASEG			
A Run Definition Deta	ails			
* Run Name	CRA_ENTERPRISE_RUN_V1		Run Description	CRA Enterprise Credit Risk V1
Run Execution Para	meters			
Back Dated	Run			
* As of Date	đ		* Run Execution Description	
		Create Batch	Execute Close	

The Run Execution Parameters window has the following sections:

- Linked To
- Run Definition Details
- Run Execution Parameters

5.3.1 Linked To

This field displays the Folder name, which is specified during Run definition.

5.3.2 Run Definition Details

This section displays the Run Name and Run Description specified for the selected Run during the Run Definition. These details cannot be edited.

5.3.3 Run Execution Parameters

The Run execution parameters must be specified for the selected Run.

Topics:

- <u>As-of-Date</u>
- Run Execution Description
- Back Dated Run

5.3.3.1 As of Date

Select an As-of-Date from the calendar.

The application uses the data available in the staging area with a date corresponding to the As of Date, for computations. This is different from the Execution Date.

5.3.3.2 Run Execution Description

This field allows you to provide a brief description of the Run Execution.

5.3.3.3 Back Dated Run

Prior to Release 8.1.0.0.3, during a Run Execution for a Previous Date, the application considered the dimensions that are currently used having the Latest Record Indicator (LRI) as **Y**, for execution.

Back Dated Execution feature enables you to specify a back dated MIS Date, which will consider the dimensions that were being used during that specific period, for execution.

Navigate to **Common Objects Maintenance**, select **Data Management**, select **Data Management Framework**, select **Data Management Tools**, and then select **DMT Configurations** to update the **SCD Mode**.

ORACLE [*] Financial Services Credit Risk Analytics							US-English 🔻	CRA81IUT 🔻
MT Configuration	n s igurations							
General Configuration	Optimizations							
∨ Generic								E Save Cancel
72T Mode	СРР	•	SCD Mode	BACKDATED_V1	*	Allow Pre806 Data	YES	Ŧ
PLC Mode	CPP		Validate Definition Query On Save	NO	Ψ.	SMG Mode	DICTIONARY	Ŧ
 File Encryption 								
Encryption At Rest	NO	Ŧ	🕜 Key File Name			(2) Key File Path		

Figure 13 Back Dated - SCD Mode

The SCD Mode field is applicable only if SCD uses a merge approach.

- CPP_V1: Select this option to perform SCD execution for Non Backdated Execution Date.
- BACKDATED_V1: Backdated support for CPP_V1. Select this option to perform SCD Execution for Backdated Execution Date.

NOTE	For the Backdated Executions containing type 2 column mappings, the following column mappings are mandatory :
	Start Date
	End Date

5.4 Executing a Run

The Runs defined in the Run Framework of OFSAAI can be executed through the **Run Management** Window.

A toggle button has been introduced in the Run Management Screen for backdated Run Execution. On enabling the toggle button, the execution is performed for backdated dates, otherwise the execution is performed for non-backdated dates.

By default, the toggle button is disabled, you need to enable it for backdated execution dates.

To execute a Run, follow these steps:

1. Specify the Run Execution parameters and Click **Create Batch** or Click **Execute**.

This creates a batch. You can schedule the batch from the **Scheduler** Module of OFSAAI or execute the batch from the **Batch Execution** Module of OFSAAI.

2. Click Execute, to monitor the status from the Batch Monitor Module of OFSAAI.

See the Operations Section in the OFS Advanced Analytics Infrastructure User Guide for details.

5.5 Run Execution Summary

To view the summary of all the Run executions for a particular Run:

 Select the Run from the list of Runs in the Run Management Summary window and click Run Execution Summary ¹

The Run Execution Summary Window is displayed as follows:

Figure 14 Run Execution Summary

un Execution Summary								
Linked To								
Folder CRASG								
un Definition Details								
	Run Name CRA_ENTERPRISE_RUN_V2			Run D	escription CRA Enterprise Credit Risk V2			
un Execution Details								
As of Date	Ψ.						~	
Run Execution ID	As of Date	Reporting Currency	Execution Status	Execution Date	Reporting Execution Flag	Back Dated Run		
1620895419857~6	07/31/2017	US Dollar	SUCCESS	2021-05-13 14:13:45.0	Y	N		
1621233014663~11	07/20/2017	US Dollar	SUCCESS	2021-05-17 12:00:17:0	N	N		
1620725919915~5	03/31/2015	US Dollar	FAILED	2021-05-11 15:08:43.0	N	N		
1620898182485~7	08/31/2017	US Dollar	SUCCESS	2021-05-13 14:59:45.0	¥	N		
1620724686922~4	03/31/2015	US Dollar	SUCCESS	2021-05-11 14:48:10.0	N	N		
1621246378150~14	07/20/2017	US Dollar	SUCCESS	2021-05-17 15:43:01.0	N	N		
1620723078722~2	01/31/2015	US Dollar	SUCCESS	2021-05-11 14:21:25.0	N	N		
1621223976378~10	07/20/2017	US Dollar	SUCCESS	2021-05-17 09:29:39.0	Y	N		
1620723559081~3	01/31/2015	US Dollar	SUCCESS	2021-05-11 14:29:22.0	N	N		
1621222422615~9	07/20/2017	US Dollar	SUCCESS	2021-05-17 09:03:48.0	Y	N		
1620906447866~8	09/30/2017	US Dollar	SUCCESS	2021-05-13 17:17:31.0	Y	N		
Page (j. et 1.5-1.6.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1								
Run Evention ID	Ar of Data	Reporting Company	Even time Status	Even time Date	Reporting Even size Elect	Back Dated Bun		

All the parameters entered as part of the **Run Definition** window are displayed in the **Run Execution Summary** window in an uneditable form. The **Run Execution Details** Section displays the Run Execution Parameters specified for each execution.

You can filter the Run executions by As-of-Date

2. Select a successful **Run Execution ID** and click **Reporting Execution Flag** to report it for execution.

xecution Summary							
Execution Details							
As of Date	*						
Run Execution ID	As of Date	Reporting Currency	Execution Status	Execution Date	Reporting Execution Flag	Back Dated Run	
1620895419857~6	07/31/2017	US Dollar	SUCCESS	2021-05-13 14:13:45.0	Y	N	
1621233014663~11	07/20/2017	US Dollar	SUCCESS	2021-05-17 12:00:17.0	N	N	
1620725919915~5	03/31/2015	US Dollar	FAILED	2021-05-11 15:08:43.0	N	N	
1620898182485~7	08/31/2017	US Dollar	SUCCESS	2021-05-13 14:59:45.0	Y	N	
1620724686922-4	03/31/2015	US Dollar	SUCCESS	2021-05-11 14:48:10.0	N	N	
1621246378150~14	07/20/2017	US Dollar	SUCCESS	2021-05-17 15:43:01.0	N	N	
1620723078722~2	01/31/2015	US Dollar	SUCCESS	2021-05-11 14:21:25.0	N	N	
1621223976378~10	07/20/2017	US Dollar	SUCCESS	2021-05-17 09:29:39.0	Y	N	
1620723559081~3	01/31/2015	US Dollar	SUCCESS	2021-05-11 14:29:22.0	N	N	
1621222422615~9	07/20/2017	US Dollar	SUCCESS	2021-05-17 09:03:48.0	Y	N	
1620906447866~8	09/30/2017	US Dollar	SUCCESS	2021-05-13 17:17:31.0	Y	N	
Page [] dT 1cH1dT18m0] K < 1 > 3 tof Reporting Run Executions per As of Date							
Run Execution ID	As of Date	Reporting Currency	Execution Status	Execution Date	Reporting Execution Flag	Back Dated Run	
1620895419857~6	07/31/2017	US Dollar	SUCCESS	2021-05-13 14:13:45.0	Y	N	
1620898182485~7	08/31/2017	US Dollar	SUCCESS	2021-05-13 14:59:45.0	Y	N	
1621223976378~10	07/20/2017	US Dollar	SUCCESS	2021-05-17 09:29:39.0	Y	N	

Figure 15: Reporting Execution Flag

A confirmation message appears before updating the Reporting Flag.

Modal Dialog	×
Are you sure you want to update Reporting Execution Flag ?	
Yes	۹o

a. Click Yes.

This Run ID is now listed in the List of Reporting Run Execution per As-of-Date Section.

b. When you select a Run execution that has failed, the **Reporting Execution Flag** is disabled.

The **List of Reporting Run Execution per As-of-Date** section displays the Run Execution Parameters, which are reported for execution.

3. Select a successful **Run Execution ID** and click **Create Extended Data Flag** to populate the data from the executed Run in the executables based on the date of the selected Run.

This feature enables you to select any one execution, out of the executions performed in a specific date. The selected Run is flagged as ready-to-execute. When you execute the <INFODOM>_CRA_BI_POPULATION batch, the data from the selected Run is populated in the respective tables, based on the date.

6 Viewing CRA Objects in the Metadata Browser

The Credit Risk Analytics under Oracle Financial Services Analytical Applications has the Metadata Browser (MDB). The MDB window displays RRF Runs in application view and CRA objects in object view.

For details, see the <u>Metadata Browser User Guide Release 8.1</u> available on the OHC Documentation Library.

OFSAA Infrastructure Components Used in OFS CRA

OFS CRA uses the following components and frameworks of OFSAA Infrastructure:

7

- **Common Object Maintenance**: It is an integral part of the infrastructure system and facilitates system administrators to define the security framework. This framework has the capacity to restrict access to the data and metadata in the warehouse, based on a flexible, fine-grained access control mechanism. See the <u>OFS Analytical Applications Infrastructure User Guide</u> for features and details.
 - **Data Model Maintenance**: OFS CRA uses the **Data Model Maintenance** Module of OFSAA. You can upload the data model using this component.
 - Data Management: OFS CRA uses the Data Management Tools such as Data Sources, Data Mapping, Data File Mapping, and Post Load Changes. Data Quality Rules and Data Quality Groups in the OFSAA Data Quality Framework. OFS MRMM uses Excel Upload (Atomic), Forms Designer, Forms Authorization, Data Entry from the Data Entry Forms, and Queries Module of OFSAA.
 - **Unified Analytical Metadata**: OFS CRA uses Dimension Management (Member, Attribute, and Hierarchy Management) from the **Unified Analytical Metadata** Module of OFSAA.
 - **Operations**: OFS CRA uses Batch Maintenance, Batch Execution, Batch Monitor, Batch Cancellation, Batch Scheduler, and View Log from **Operations** Module of OFSAA.
 - Process Modeling Framework: OFS CRA uses the Process Modeling Framework Module of OFSAA.
 - **Rule Run Framework**: Process Modeling Framework internally uses **Process** and **Run** from the OFSAA Run Rule Framework.
- **Object Administration**: It is an integral part of the infrastructure and facilitates System Administrators to define the Security Framework. See the <u>OFS Advanced Analytics</u> <u>Infrastructure User Guide</u> for details.

8 OFS Credit Risk Analytics Dashboards and Reports

OFS Credit Risk Analytics application integrates the results generated with Oracle Business Intelligence Enterprise Edition. It provides you with a reporting-cum-information framework which can be used for generating reports and viewing information relevant to computations and other features of the OFS Credit Risk Analytics application.

OFS Credit Risk Analytics application serves as a single regulatory and management reporting solution. It leverages the capabilities of Oracle Business Intelligence Enterprise Edition, to provide ready-to-use reporting of your OFS Credit Risk Analytics application results. Through OBIEE, you have access to a robust reporting engine for managing all your Business Intelligence requirements.

The key elements are:

- Tabular and pivot table reporting
- Drill across capability
- Dashboard publishing
- Graphing and charting
- Export options, such as Excel, PowerPoint, and PDF

8.1 OFS Credit Risk Analytics List of Dashboards

The following table lists the reports available in OFS Credit Risk Analytics release v8.1.0.0.8.

SI. No.	Dashboard	Page	Analysis	Reports
1	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio-Summary	 Credit Portfolio - Summary Key Credit Metrics Key Credit Metrics - Composition
2	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio-Variance	 Credit Portfolio – Variance EOP Balance - Total – Variance Key Credit Metrics – Variance
3	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio-Trend	 Credit Portfolio – Trend Credit Portfolio – Trend of Variance % Key Credit Metrics - Trend Key Credit Metrics - Variance
4	Enterprise Credit Risk	Credit Portfolio Overview	Credit Portfolio – Inflows and Outflows	 Credit Portfolio – Inflows and Outflows Key Credit Metrics - Inflows and Outflows

Table 8: Reports in OFS CRA

Sl. No.	Dashboard	Page	Analysis	Reports
5	Enterprise Credit Risk	Credit Portfolio Overview	Credit Exposure Distribution by Tenor - Fund based Exposures	 Credit Exposure Distribution by Tenor - Fund based exposures Credit Exposure - Maturity Profile (actuals) Credit Exposure - Maturity Profile (percentage)
6	Enterprise Credit Risk	Credit Quality	Credit Quality Ratio – Summary	 Credit Quality Ratio – Summary Key Stressed Asset Ratios Key Credit Loss Reserve Ratios Key Coverage Ratios
7	Enterprise Credit Risk	Credit Quality	Credit Quality Ratio – Trend	 Credit Quality Ratio – Trend Key Credit Quality Ratios - Trend
8	Enterprise Credit Risk	Credit Quality	Stressed Assets Classification Summary	 Stressed Assets Classification Summary Stressed Assets Classification Delinquent Exposures Classification NPA Exposures Classification
9	Enterprise Credit Risk	Credit Quality	Credit Quality and Stressed Assets – Trend	 Credit Quality and Stressed Assets – Trend Credit Quality and Stressed Assets – Variance Stressed Assets Classification & Reserves – Trend Stressed Assets Classification & Reserves – Variance
10	Enterprise Credit Risk	Credit Quality	Stressed Assets - Cost Analysis	 Stressed Assets - Cost Analysis Watchlisted Exposures - Cost Composition Watchlisted Exposures - Cost Analysis
11	Enterprise Credit Risk	Credit Quality	Stressed Assets - Change Analysis	 Stressed Assets – Change Analysis (tabular report) Stressed Assets - Change Analysis (graphical report)
12	Enterprise Credit Risk	Credit Quality	Allowance For Loans and Lease Losses - Change Analysis	 Allowance For Loans and Lease Losses - Change Analysis Allowance for Loan and Lease Losses - Change
Sl. No.	Dashboard	Page	Analysis	Reports
------------	------------------------	---------------------	--------------------------------	---
13	Enterprise Credit Risk	New Business	New Business – Summary	 New Business Summary Incremental Business (GCE) – Analysis Current GCE Composition Incremental Business (GCE) – Composition
14	Enterprise Credit Risk	New Business	Top New Business	 Top Incremental Business - New and Existing Accounts Top Incremental Business - Existing Accounts - Quality and Concentration Top Incremental Business - New Accounts - Quality and Concentration Incremental Business
15	Enterprise Credit Risk	New Business	New Business – Trend	 New Business Trend Incremental Business – Trend Incremental Business – Trend of Proportions
16	Enterprise Credit Risk	Concentration	Concentration Analysis	 Concentration Analysis GCE Concentration Delinquent Concentration NPA Concentration
17	Enterprise Credit Risk	Capital Requirement	Capital Requirement Summary	 Capital Requirement Summary Capital and Reserves – Summary Capital Requirement – Composition
18	Enterprise Credit Risk	Capital Requirement	Capital Holding Summary	 Capital Holding Summary Capital Holding - Summary and Composition
19	Enterprise Credit Risk	Capital Requirement	Capital Requirement Trend	 Capital Requirement Trend Capital Holding, Expected Loss and Reserves – Trend Capital Holding, Reserves, and Expected Loss – Variance

Sl. No.	Dashboard	Page	Analysis	Reports
20	Enterprise Credit Risk	Top Exposures	Top Exposures	 Top Exposures Top Exposures Gross Credit Exposure & EOP of Top Exposures Top Exposure Proportion Top Exposures - Composition by PD, Concentration & Growth
21	Wholesale Credit Risk	Credit Portfolio	Credit Portfolio Summary	Credit Portfolio - Summary
		Overview	,	 Key Credit Metrics Key Credit Metrics - Composition
22	Wholesale Credit Risk	Credit Portfolio Overview	Credit Portfolio – Inflows	Credit Portfolio – Inflows and Outflows
				Key Credit Metrics - Inflows and Outflows
23	Wholesale Credit Risk	Credit Quality	Stressed Assets Classification Summary	 Stressed Assets Classification Summary Stressed Assets Classification Delinquent Exposures Classification NPA Exposures Classification
24	Wholesale Credit Risk	Credit Quality	Loan Loss Reserves Summary	Loan Loss Reserves SummaryLoan Loss Reserves Key Metrics
25	Wholesale Credit Risk	Credit Quality	Credit Quality Trend	 Credit Portfolio and Asset quality – Trend Credit Portfolio and Asset Quality – Trend of Variance Key Credit Metrics – Trend Key Credit metrics – Variance Trend Stressed Asset Classification Trend Stressed Asset Classification – Variance Trend Loan Loss Reserves – Trend Loan Loss Reserves – Variance Trend

SI. No.	Dashboard	Page	Analysis	Reports
26	Wholesale Credit Risk	Credit Quality	Credit Quality Ratio Summary	 Credit Quality Ratio – Summary Key Stressed Asset Ratios Key Credit Loss Reserve Ratios Key Coverage Ratios
27	Wholesale Credit Risk	Credit Quality	Credit Quality Ratio Trend	 Credit Quality Ratio – Trend Key Credit Quality Ratios - Trend
28	Wholesale Credit Risk	Credit Quality	Stressed Assets - Change Analysis	 Stressed Assets – Change Analysis (tabular) Stressed Assets - Change Analysis (graphical)
29	Wholesale Credit Risk	Credit Quality	Allowance For Loans and Lease Losses - Change Analysis	 Allowance for Loans and Lease Losses - Change Analysis Allowance for Loan and Lease Losses – Change
30	Wholesale Credit Risk	Top Exposures	Top Exposures	 Top Exposures (tabular) Top Exposures (graphical) Gross Credit Exposure & EOP of Top Exposures Top Exposure Proportion Top Exposures - Composition by PD, Concentration & Growth
31	Wholesale Credit Risk	Rating Migration and Transition	Rating Migration Analysis	 Rating Migration Matrix Rating migration analysis - Upgrades and Downgrades (tabular report) Rating Migration -Change Analysis (tabular report) Rating migration analysis - Upgrades and Downgrades (graphical report) Rating Migration Analysis Rating Migration -Change Analysis (graphical report)
32	Wholesale Credit Risk	Rating Migration and Transition	Rating Transition Probability	 Rating Transition Probability (tabular) Rating Transition Probability (graphical)

Sl. No.	Dashboard	Page	Analysis	Reports
33	Wholesale Credit Risk	New Business	New Business – Summary	 New Business Summary Incremental Business (GCE) – Analysis Current GCE Composition Incremental Business (GCE) – Composition
33	Wholesale Credit Risk	New Business	Top New Business	 Top Incremental Business – New & Existing Accounts Top Incremental – Existing Accounts – Quality & Concentration Top Incremental – New Accounts – Quality & Concentration Incremental Business
34	Wholesale Credit Risk	New Business	New Business – Trend	 New Business Trend Incremental Business – Trend Incremental Business – Trend of Proportions
35	Wholesale Credit Risk	Concentration	Concentration Analysis	 Concentration Analysis. GCE Concentration Delinquent Concentration NPA Concentration
36	Wholesale Credit Risk	Concentration	Concentration Trend	Concentration Trend (tabular)Concentration Trend (graphical)
37	Wholesale Credit Risk	Concentration	Top Concentration	 Top GCE Concentration Top Delinquent Concentration Top NPA Concentration
38	Wholesale Credit Risk	Group Exposure	Group Exposure Summary	 Group Exposure Summary Top Group Exposures – Credit quality & Concentration Top Group Exposures
39	Credit Risk – Trading Book	Single Counterparty Credit Exposures	Single Counterparty Credit Exposures	 Top Single Counterparty Credit Exposures Top CCE – Credit Quality and Concentration

SI. No.	Dashboard	Page	Analysis	Reports
40	Credit Risk – Trading Book	Group Exposure	Group of Connected Counterparties Credit Exposures (GCCE)	 Group of Connected Counterparty Credit Exposures (GCCE) Top GCCE – Asset Quality and Concentration
41	Credit Risk – Trading Book	Portfolio Summary – Obligor Type	Portfolio Summary- Obligor Type	 Portfolio Summary – Obligor Type Key Metrics Summary Probable Exposure Summary Margin and Collateral Summary Key Metrics Composition Asset Quality and Concentration
42	Retail Credit Risk	Credit Portfolio Overview	Credit Portfolio - Summary	 Credit Portfolio Summary Key Credit Metrics Key Credit Metrics - Composition
43	Retail Credit Risk	Credit Portfolio Overview	Credit Portfolio – Inflows and Outflows	 Credit Portfolio – Inflows and Outflows Key Credit Metrics - Inflows and Outflows
44	Retail Credit Risk	Credit Quality	Stressed Assets Classification Summary	 Stressed Assets Classification Summary Stressed Assets Key Classification Delinquent Exposures Classification NPA Exposures Classification Foreclosures and Charge Offs - Summary Stressed Assets Composition

SI. No.	Dashboard	Page	Analysis	Reports
45	Retail Credit Risk	Credit Quality	Credit Quality – Summary	 Credit Quality Summary Number of Accounts – Portfolio Summary Loan Loss Reserves key Metrics Exposure Utilization Summary Exposure Mitigation Summary Key Credit Quality Metrics Composition Overdues/ Foreclosures Summary
46	Retail Credit Risk	Credit Quality	Credit Portfolio & Asset Quality - Trend	 Credit Portfolio and Asset Quality – Trend Credit Portfolio and Asset Quality - Trend of Variance Key Credit Metrics Trend Key Credit Metrics Variance Trend Stressed Assets Classification - Trend Stressed Assets Classification- Variance Trend Loan Loss Reserves - Trend Loan Loss Reserves - Variance Trend
47	Retail Credit Risk	Credit Quality	Credit Quality Ratio – Summary	 Credit Quality Ratio – Summary Key Stressed Asset Ratios Key Credit Loss Reserve Ratios Key Coverage Ratios Mitigant Value Analysis Key Credit Quality Metrics
48	Retail Credit Risk	Credit Quality	Credit Quality Ratio – Trend	 Credit Quality Ratio – Trend Key Credit Quality Ratios - Trend Credit Quality Ratios - Detailed Trend
49	Retail Credit Risk	Credit Quality	Stressed Assets - Change Analysis	 Stressed Assets – Change Analysis (tabular report) Stressed Assets – Change Analysis (graphical report)
50	Retail Credit Risk	Credit Quality	Allowance For Loans and Lease Losses - Change Analysis	 Allowance for Loans and Lease Losses - Change Analysis Allowance for Loan and Lease Losses - Change

SI. No.	Dashboard	Page	Analysis	Reports
51	Retail Credit Risk	Rating Migration and Transition	 Migration and Migration Analysis Migration Matrix Migration Analysis - and Downgrades (tareport) Migration Change A (tabular report) Migration Analysis - and Downgrades (greport) Migration Analysis - and Downgrades (greport) Migration Analysis Migration Analysis 	
52	Retail Credit Risk	Rating Migration and Transition	Transition Probability	 Transition Probability Matrix (Delinquency Bands) Transition Probability (Delinquency Bands)
53	Retail Credit Risk	Concentration	Concentration Analysis	 Concentration Analysis GCE Concentration Delinquent Concentration NPA Concentration Concentration – Other Key Measures
54	Retail Credit Risk	Concentration	Concentration Analysis - Trend	 Concentration Analysis – Trend Concentration – Trend
55	Retail Credit Risk	New Business	New and Existing Business - Summary	 New and Existing Business Summary New Business – Key Credit Metrics New Business – Key Metrics Composition New Business – Credit Quality and Concentration Existing Business – Key Credit Metrics Existing Business – Key Metrics Composition

SI. No.	Dashboard	Page	Analysis	Reports
56	Retail Credit Risk	New Business	New Business - Trend	 New Business Trend (tabular report) New Business – Trend (graphical report) New Business – Trend of Variance New Business – Detailed Trend New Business – Trend of Proportions
57	Retail Credit Risk	New Business	New Business – Ability to Pay Summary	 New Business Ability to Pay Summary New Business – Ability to Pay and Liquidity Analysis New Business – Ability to Pay Composition
58	Retail Credit Risk	Collections	Collections	 Collections Collections Overview Collections Detailed Summary Collections Performance Summary

NOTE

In all the drill-down reports, the **Days Past Due** column displays the maximum overdue date for that obligor.

9 Enterprise Credit Risk Dashboard - Credit Portfolio Overview

The following table displays the page level filters which apply to all the analysis on this page.

Table	9:	Parameters	in	the	Page -	- Credit	Portfolio	Overview
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Dashboard Name	Enterprise Credit Risk			
Subject Area	Enterprise Credit Risk			
Page Name	Credit Portfolio Overview			
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 			
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification			
Page-Level Display Parameters	Not Applicable			

The following analysis are displayed as part of the Credit Portfolio Overview Page:

- <u>Credit Portfolio Summary</u>
- <u>Credit Portfolio Variance</u>
- <u>Credit Portfolio Trend</u>
- <u>Credit Portfolio Inflows and Outflows</u>
- <u>Credit Exposure Distribution by Tenor</u>

9.1 Credit Portfolio - Summary

This section describes the parameters of the Credit Portfolio - Summary Analysis.

Table 10: Credit Portfolio - Summary Analysis Parameters

Analysis Name	Credit Portfolio - Summary			
Report Level Filters	Tabular Report: Not ApplicableGraphical Report: All the dimensions covered by this analysis.			
Analysis Description	 This analysis provides a multidimensional overview of the credit portfolio across the trading and banking book, through a combination of key credit measures such as: Gross Credit Exposure (GCE) EOP Balance – Fund Based (EOP-FB) 			

	EOP Balance – Non-Fund Based (EOP-NFB)					
	EOP Balance Total (EOP-Total)					
	Lindrawn Balance					
	Non-Performing Assets (NPA)					
	Non-Performing Assets (INIA) Non-Derforming Assets / Total EOD Balanco					
	Allowance for Lean and Lease Lesser (ALLL)					
	Allowance for Loan and Lease Losses (ALLL)					
	Allowance for Loan and Lease Losses/ Total EOP Balance.					
	Security value					
	This analysis is presented through a combination of Tabular and Graphical Reports, consisting of the following:					
	 Credit Portfolio - Summary: A multidimensional Tabular Report displaying all the measures for all the listed dimensions. 					
	• Key Credit Metrics : A combination chart where for a given measure and selected dimension, the stacked column chart displays the Undrawn Balance Commitments, EOP Balance –Total, NPA/Total EOP Balance, and Allowance for Loan and Lease Loss/Total EOP Balance and the line charts display the amount and percentage. To view the drill-down report, click on the graph and then click Key Credit Metrics – Detail. The following metrics are listed:					
	 Obligor 					
	 Obligor ID 					
	 Gross Credit Exposure 					
	EOP Balance – Fund Based					
	 EOP Balance – Non Fund Based 					
	Total EOP Balance					
	Undrawn Amount					
Poports Covered	Overdue					
Reports Covereu	Days Past Due					
	 Allowance for Loan and Lease Losses 					
	Expected Loss					
	 Security Value 					
	Utilization Percent					
	■ PD					
	 Rating 					
	Credit Score					
	Credit Status					
	NOTE Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.					
	Watchlist Status					
	- Watchinst Status					
	 Reg Credit Metrics - Composition: A Radar Chart displaying the composition of percentage proportion of all the Key Credit Measures (except ratios) by a selected combination of dimensions and measures. 					
	Product					
Dimensions	Product Type					
	Organization Type					

	Line of Business
	Natural Currency
	Maturity Profile
	Credit Status (In Graphical Reports)
	Watchlist Status (In Graphical Reports)
Drill-down on	To view a detailed drill-down report, click on the Bar Graph and select the Key Credit Metrics – Details.
	In the Credit Portfolio – Summary under Key Credit Metrics Bar Graph, click on any bar in graph and select the Key Credit Metrics – Details to drill-down to a table considering various measures.
Drill-down Path	The various measures available as part of the drill-down are:
Dim-down rath	Borrower
	Gross Credit Exposure
	EOP Balance - Fund Based
	EOP Balance – Non Fund Based
	Total EOP Balance
	Undrawn Amount
	Overdue
	Allowance for Loan and Lease Losses
	Expected Loss
	Security Value
	Utilization Percent
	• PD
	Rating
	Credit Score
	Credit Status
	NOTE Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.
	Watchlist Status

9.2 Credit Portfolio - Variance

This section describes the parameters of the Credit Portfolio - Variance Analysis.

Analysis Name	Credit Portfolio – Variance
Report Level Filters	 Tabular Report: All the measures covered by this analysis. Graphical Reports: All the dimensions and measures covered by this analysis and the reference period for measuring the variance.

	This analysis presents how a selected measure, on a selected date varies from the last reporting date, beginning of the financial year, and the previous year on the same day.
	Along with the actual values of the selected measure, the report also displays the Year on Year (YoY), Year to Date (YTD), and Last Reporting to Date (RTD) variance in actuals and percentage.
	The measures covered by this analysis are:
Analysis Description	Gross Credit Exposure (GCE)
	EOP Balance – Fund Based (EOP-FB)
	EOP Balance – Non-Fund Based (EOP-NFB)
	EOP Balance Total (EOP-Total)
	Undrawn Balance
	Non-Performing Assets (NPA)
	Allowance for Loan and Lease Losses (ALLL)
	This analysis is presented through a combination of a tabular and a graphical report, including the following:
	• Credit Portfolio – Variance : A multidimensional tabular report displaying the variance of a selected measure over three periods (Year on Year (YoY), Year to Date (YTD), and Last Reporting to date (RTD). The measures covered are:
	Current Balance
	 Balance Previous Year
	 Balance Beginning of the Year
	 Balance Last Reporting Date
	YoY Variance Amount
	YoY Variance Percentage
Reports Covered	YTD Variance Amount
	 YTD Variance Percentage
	 Variance Over Last Reporting Date Amount
	 Variance Over Last Reporting Date percentage
	• EOP Balance - Total – Variance: A combination chart where for a selected measure and dimension, a clustered column chart displays the comparison between current balance and the balance for the selected reference period (previous year, beginning of the current financial year, and last reporting date) and the scatter plot displays the variance between these two balances.
	• Key Credit Metrics – Variance : A line chart which displays the variance of the current balance (as of date) over the last reporting date, beginning of the financial year and previous year same date, for all the key credit measures, for a combination of dimensions.
	Line of Business
	Product Type
Dimensions	Product
	Organization Structure
	Natural Currency
Drill-down	Not Applicable

Drill- down Path

Not applicable

9.3 Credit Portfolio - Trend

This section describes the parameters of the Credit Portfolio - Trend Analysis.

Analysis Name	Credit Portfolio - Trend
Report Level Filters	 Tabular Report: Periodicity of trend and all the measures covered by this analysis. Graphical Reports: All dimensions covered by the analysis and periodicity of the trend.
Analysis Description	 This analysis gives a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. In addition to the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period. The measures covered by this analysis are: Gross Credit Exposure (GCE) EOP Balance – Fund Based (EOP-FB) EOP Balance – Non-Fund Based (EOP-NFB) EOP Balance Total (EOP-Total) Undrawn Balance Non-Performing Assets (NPA) Allowance for Loan and Lease Losses (ALLL)
Reports Covered	 This analysis is presented through a combination of a tabular and a graphical report, comprising the following: Credit Portfolio – Trend: A multidimensional tabular report displaying the trend of a selected measure, over 8 years or 8 quarters or 8 months. Credit Portfolio – Trend of Variance Percentage: A multidimensional tabular report displaying the variance and the variance percentage for the selected reference period, over 8 years or 8 quarters, or 8 months. Key Credit Metrics - Yearly Trend: A line chart displaying the trend of all the key measures over the 8 years or 8 quarters, or 8 months for a given dimension type. Key Credit Metrics - Yearly Variance: A line chart displaying the variance of all the key measures over 8 years or 8 quarters, or 8 months for a given dimension type.
Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency
Drill-down on	Not Applicable

Drill-down Path

Not applicable

9.4 Credit Portfolio – Inflows and Outflows – Fund Based Exposures

This section describes the parameters of the Credit Portfolio – Inflows and Outflows Fund Based Exposures Analysis.

Analysis Name	Credit Portfolio – Inflows and Outflows – Fund Based Exposures
Report Level Filters	 Tabular Report: All the measures covered by this analysis and reference period. Graphical Reports: All the measures, dimensions and reference periods covered by this analysis.
Analysis Description	 This analysis provides a multidimensional view of the change in the selected measure through inflows and outflows during a selected period. The reports in the analysis display the Opening Balance, Inflows, Outflows, Current Balance, Variance Amount (between the opening and closing balance), and Variance In Percentage. The periods covered in this analysis are: Last Reporting Date Beginning of the Quarter Beginning of the Month Beginning of the Financial Year Previous year on the Same Day The measures covered in this analysis are: EOP Balance - Total Gross Credit Exposure
Reports Covered	 This analysis is presented through a combination of a tabular and a graphical report, including the following: Credit Portfolio – Inflows and Outflows: A multidimensional Tabular Report displaying the change in the selected measure through inflows and outflows during the selected period. Key Credit Metrics - Inflows and Outflows: A clustered column chart displaying the change in the selected measure through inflows and outflows during the selected period.
Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

 Table 13: Credit Portfolio – Inflows and Outflows – Fund Based Exposures Analysis Parameters

9.5 Credit Portfolio Distribution by Tenor - Fund Based Exposures

This section describes the parameters of the Credit Portfolio Distribution by Tenor - Fund Based Exposures analysis.

Analysis Name	Credit Portfolio Distribution by Tenor - Fund Based Exposures
Report Level Filters	Tabular Report: Not applicableGraphical Reports: All the dimensions covered by this analysis.
Analysis Description	This analysis provides a multidimensional view of credit exposure and its spread across different tenors.
	This analysis is presented through a combination of a tabular report and graphical report, comprising the following:
	 Credit Exposure Distribution by Tenor- Fund Based Exposures: A multidimensional Tabular Report displaying the EOP Balance (Current balance) and the spread of EOP Balance across different tenors such as:
	 Repayments due in 12 months
	 Repayments due in 12 months %
	 Repayment due after 12 months but not later than 24 months
	 Repayment due in 12 months to 24 months %
	 Repayment due after 24 months but not later than 36 months
Reports Covered	 Repayment due in 24 months to 36 months %
	 Repayment due after 36 months but not later than 48 months
	 Repayment due in 36 months to 48 months %
	 Repayment due after 48 months
	 Repayment due above 48 months %
	 Credit Exposure - Maturity Profile (Actuals): A bridge chart displaying the spread of the exposure (EOP Balance) in actuals across different tenors, for the selected combination dimensions.
	 Credit Exposure - Maturity Profile (Percentage): A bridge chart displaying the spread of the exposure (EOP Balance) in percentage across different tenors, for the selected combination of dimensions.
	Line of Business
	Product Type
Dimensions	Product
	Organization Structure
	Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

10 Enterprise Credit Risk Dashboard-Credit Quality

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 15: Parameters in the Page – Credit Quality

Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Credit Quality
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification
Page-Level Display Parameters	Not Applicable

The following analysis are displayed as part of the Credit Quality Page:

- <u>Credit Quality Ratio Summary</u>
- <u>Credit Quality Ratio Trend</u>
- Stressed Assets Classification Summary
- <u>Credit Quality and Stressed Assets Trend</u>
- Stressed Assets Cost Analysis
- <u>Stressed Assets Change Analysis</u>
- <u>Allowance For Loans and Lease Losses Change Analysis</u>

10.1 Credit Quality Ratio - Summary

This section describes the parameters of the Credit Quality Ratio - Summary Analysis.

 Table 16: Credit Quality Ratio - Summary Analysis Parameters

Analysis Name	Credit Quality Ratio - Summary
Report Level Filters	 Tabular Report: Not Applicable Graphical Reports: All the dimensions covered by this analysis. Legal Entity Line of Business

	Product Type
	Product
	Organization Structure
	Industry
	Obligor Rating
	Exposure Bands
	Customer Type
	Natural Currency
	•
Analysis Description	This analysis provides a multidimensional overview of the key credit quality ratios across the trading and banking book, through measures such as: • Watchlist Ratio • Delinquent Ratio • NPA Ratio • Allowance for Loans Lease and Losses • ALLL Ratio • ALLL-NPA Coverage Ratio • Provisions • Current Provisions Ratio • Net Charge Off • ALLL- NCO Coverage Ratio • Charge Off Ratio • WAPD
	This analysis is presented through a combination of a tabular and a graphical report,
Reports Covered	 Credit Quality Ratio – Summary: A multidimensional tabular report displaying the Watchlist Ratio, Delinquent Ratio, NPA Ratio, Allowance for Loans Lease and Losses, ALLL Ratio, ALLL-NPA Coverage Ratio, Provisions, Current Provisions Ratio, Net Charge Off, ALLL- NCO Coverage Ratio, Charge Off Ratio and WAPD for all the listed dimensions. Various dimension filters are listed for the following reports. To view the filtered data, select the dimension and various filters and click Apply.
	 Key Stressed Asset Ratios: A column chart displaying the key stressed assets ratios such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, and WAPD for the selected combination of dimensions.
	• Key Credit Loss Reserve Ratios : A column chart displaying the Key Credit Loss Reserve ratios such as ALLL Ratio, Current Provision Ratio, and Charge off Ratio for the selected combination of dimensions.
	 Key Coverage Ratios: A column chart displaying the key coverage ratios such as ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio for the selected combination of dimensions.
	Legal Entity
	Line of Business
Dimensions	Product Type
	Product
	Organization Structure

	Industry
	Obligor Rating
	Customer Type
	Natural Currency
	Exposure Band
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

10.2 Credit Quality Ratio – Trend

This section describes the parameters of the Credit Quality Ratio - Trend Analysis.

Analysis Name	Credit Quality Ratio - Trend
Report Level Filters	 Tabular Report: All the measures covered by this analysis and periodicity of the trend. Graphical Reports: All dimensions covered by this analysis and periodicity of the trend.
Analysis Description	 This analysis provides a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. The measures covered in this analysis are: Watchlist Ratio Delinquent Ratio NPA Ratio ALLL Ratio ALLL-NPA Coverage Ratio Current Provision Ratio ALLL-NCO Coverage Ratio Charge off Ratio
Reports Covered	 This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: Credit Quality Ratio – Trend: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters, or 8 months. Key Credit Quality Ratios – Yearly Trend: A Line Chart displaying the trend of all the measures over the 8 years or 8 quarters, or 8 months for the selected combination of dimensions and measures. You can filter data from the following list of measures: All Measures Delinquent Ratio NPA Ratio Watchlist Ratio ALLL Ratio Current Provision Ratio

Table 17: Credit Quality Ratio - Trend Analysis Parameters

	 ALLL – NPA Coverage Ratio 	
	 ALLL -NCO Coverage Ratio 	
	Charge off Ratio	
	Line of Business	
	Product Type	
Dimensions	Product	
	Organization Structure	
	Natural Currency	
Drill-down on	Not Applicable	
Drill-down Path	Not Applicable	

Stressed Assets Classification Summary 10.3

This section describes the parameters of the Stressed Assets Classification Summary Analysis.

able 18: Stressed Asset	able 18: Stressed Assets Classification Summary Analysis Parameters		
Analysis Name	Stressed Assets Classification Summary		
Report Level Filters	Tabular Report: Not Applicable		
	This analysis gives a multidimensional view of credit quality of the portfolio by		
	displaying how the credit exposure is spread across various asset classes such as:		
	Watchlisted		
	Delinquent - up to 30 DPD		
	Delinquent 31-60 DPD		
Analysis Description	Delinquent - more than 60 DPD		
	Total Delinquent exposures		
	NPA - Substandard Assets		
	NPA - Doubtful Assets		
	NPA - Loss Assets		
	Total NPAs		
	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:		
	 Stressed Assets Classification Summary: A multidimensional tabular report displaying the spread of credit exposure across various types of asset classes such as: 		
	 Watchlisted Exposure 		
Reports Covered	 Delinquent Exposure - up to 30 DPD 		
	 Delinquent Exposure 31-60 DPD 		
	 Delinquent Exposure - more than 60 DPD 		
	 Total Delinquent Exposure 		
	 NPA Exposure - Substandard Assets 		
	 NPA Exposure - Doubtful Assets 		

Та

	 NPA Exposure - Loss Assets
	 Total NPAs
	 Stressed Assets Classification: A column chart that provides a multidimensional view of the credit quality of the portfolio and its spread across key stressed asset classes such as Watchlisted, Delinquent, and Non- Performing Assets, for the selected combinations of dimensions.
	 Delinquent Exposures Classification: A column chart that provides an in- depth analysis of the Delinquent Exposure and its spread across delinquency bands such as Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, and Delinquent Exposure – more than 60 Days DPD, for the selected combinations of dimensions.
	 NPA Exposures Classification: A column chart that provides an in-depth analysis of the Non-Performing Assets and its spread across various NPA subclasses such as NPA – Sub-Standard Exposure, NPA-Doubtful Exposure, and NPA Loss Exposures, for the selected combinations of dimensions.
Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not applicable

10.4 Credit Quality and Stressed Assets – Trend

This section describes the parameters of Credit Quality and Stressed Assets – Trend Analysis.

Table 19: Credit Quality and Stressed Assets – Trend Analysis Parameters

Analysis Name	Credit Quality and Stressed Assets – Trend		
Report Level Filters	 Tabular Report: All measures covered by this analysis and periodicity of the trend. Graphical Reports: All dimensions covered by this analysis and periodicity of the trend. 		
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. Along with the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period. The measures covered by this analysis are:		
	 Watchlisted Exposures Delinquent Exposures- up to 30 DPD Delinquent Exposures 31-60 DPD Delinquent Exposures- more than 60 DPD Total Delinquent Exposures NPA Exposures - Substandard Assets 		

	NPA exposures - Doubtful Assets
	NPA exposures - Loss Assets
	Total NPAs
	Allowance for Loans and Lease Losses
	Provisions
	Net Charge Off
	This analysis is presented through a combination of tabular and graphical reports, comprising the following:
	 Credit Quality and Stressed Assets – Trend: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters or 8 months.
	 Credit Quality and Stressed Assets – Variance: A multidimensional tabular report displaying the variance of a selected measure over 8 years or 8 quarters or 8 months.
	• Stressed Assets Classification & Reserves – Trend: A line chart displaying the trend of all measures over 8 years or 8 quarters or 8 months for the selected dimensions, selected combinations of dimensions, and measures. You can filter the data based on the following measures:
	 All Measures
	 Watchlisted Exposures
	 Delinquent Exposure – upto 30 days DPD
	 Delinquent Exposure – 31 to 60 days DPD
	 Delinquent Exposure – More than 60 days DPD
	 Total Delinquent Exposures
	 NPA – Sub-Standard Exposure
	 NPA-Doubtful Exposure
Reports Covered	 NPA -Loss Exposure
	 Total Non-Performing Assets
	 Allowance for Loans & Lease Losses
	 Provisions
	 Net Charge Off
	 Stressed Assets Classification & Reserves – Variance: A line chart displaying the variance of all measures, over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and measures. You can filter the data based on the following measures:
	 All Measures
	 Watchlisted Exposures
	 Delinquent Exposure – upto 30 days DPD
	 Delinquent Exposure – 31 to 60 days DPD
	 Delinquent Exposure – More than 60 days DPD
	 Total Delinquent Exposures
	 NPA – Sub-Standard Exposure
	 NPA-Doubtful Exposure
	 NPA -Loss Exposure
	 Total Non-Performing Assets
	 Allowance for Loans & Lease Losses

	ProvisionsNet Charge Off	
Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency 	
Drill-down on	Not Applicable	
Drill-down Path	Not Applicable	

10.5 Stressed Assets - Cost Analysis

This section describes the parameters of the Stressed Assets - Cost Analysis.

Table 20:	Stressed	Assets -	Cost /	Analysis	Parameters

Analysis Name	Stressed Assets - Cost Analysis
Report Level Filters	Tabular Report: All the measures (Stressed Asset Class) such as Watchlisted Exposures, Delinquent Exposures, and NPA.
	Graphical Reports: All the dimensions and measures (stressed asset class).
Analysis Description	This analysis provides a multidimensional cost analysis of various stressed asset classes such as Watchlisted Assets, Delinquent Assets, and Non-Performing Assets.
	This analysis is presented through a combination of tabular and graphical reports, consisting of the following:
	 Watchlisted Exposures - Cost Analysis: A multidimensional tabular report displaying the Number of borrowers, Carrying Cost and Amortized Cost, for the selected stressed asset class, for all the listed dimensions.
	• Watchlisted Exposures - Cost Composition: A radar chart displaying the composition of Number of borrowers, Carrying Cost and Amortized Cost for the selected combination of dimensions, for a selected stressed asset class. You can filter the results based on the following measures:
	All Measures
Reports Covered	 Number of Accounts
	Carrying Cost
	Amortized Cost
	 Stressed Assets Exposures - Cost Analysis: A column chart displaying the number of accounts, amortized cost, and carrying cost, for a selected stressed asset class, across a selected combination of dimensions. You can filter the results based on the following measures:
	 Watchlisted Exposures
	Delinquent Exposures
	 Non-Performing Assets
Dimensions	Line of Business

	Product Type
	Product
	Organization Structure
	Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

10.6 Stressed Assets - Change Analysis

This section describes the parameters of the Stressed Assets – Change Analysis.

Analysis Name	Stressed Assets – Change Analysis
Report Level Filters	 Tabular Report: All the measures (such as Watchlisted Exposures, Delinquent Exposures, Non-Performing Assets) and Reference Period. Graphical Reports: All dimensions and measures (Stressed Asset Class) covered by the analysis, and Reference Period.
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the credit exposure to a selected stressed asset class (measure), between a Selected Reference Period and Current Date. The reference periods covered by this analysis are: • Previous Year • Beginning of Year • Beginning of the Quarter • Beginning of the Quarter • Beginning of the Month The measures (Stressed Asset Class) covered by this analysis are: • Watch listed Assets • Delinquent Assets • Non-Performing Assets
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Stressed Assets - Change Analysis: A multidimensional tabular report, displaying change and reasons for the changes in exposure to a selected stressed asset class (measure), between a selected reference period and current date. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance. Stressed Assets - Change Analysis: A bridge chart that analyzes the change and reasons for the change in exposure to selected stressed asset class (measure), between a selected reference period and current date, for a selected combination of dimensions. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance.

Table 21: Stressed Assets – Change Analysis Parameters

ALLOWANCE FOR LOANS AND LEASE LOSSES - CHANGE ANALYSIS

Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency 	
Drill-down on	Not Applicable	
Drill-down Path	Not Applicable	

10.7 Allowance for Loans and Lease Losses - Change Analysis

This section describes the parameters of the Allowance for Loans and Lease Losses - Change Analysis.

Analysis Name	Allowance for Loans and Lease Losses - Change Analysis		
Report Level Filters	 Tabular Report: Reference Period Graphical Reports: Reference Period and all the dimensions covered by this analysis 		
Analysis Description	 This analysis provides an understanding of the changes and reasons for changes in the ALLL, between a selected reference period and the current date. The reference periods covered by this analysis are Previous Year Beginning of Year Beginning of the Quarter Beginning of the Month 		
Reports Covered	 Deginning of the Month This analysis is a combination of Tabular and Graphical Reports, consisting the following: Allowance for Loans and Lease Losses - Change Analysis: A multidimensional tabular report displaying the changes and reasons for changes in the ALLL between a selected reference period and current date. The report displays the Opening Balance of ALL, Net Charge Off During the Period, Reserves before Provisions, Commercial Provisions made during the period, Consumer Provisions made during the period, Total Provisions made during the period, Other Changes and Current Balance of ALLL. Allowance for Loan and Lease Losses – Change: A bridge chart that analyzes the change and reasons for the changes in the ALLL, between a selected Reference Period and Current Date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge Off During the Period, Reserves before Provisions, Commercial Provisions made during the period, Reserves before Provisions, Commercial Provisions made during the period, Reserves before Provisions, Commercial Provisions made during the period, Reserves before Provisions, Commercial Provisions made during the period, Reserves before Provisions, Commercial Provisions made during the period, Reserves before Provisions made during the period, Reserves before Provisions made during the period, Consumer Provisions made during the period, Total Provisions made 		
Dimensions	Line of BusinessLegal Entity		

Table 22: Allowance for Loans and Lease Losses - Change Analysis Parameters

ALLOWANCE FOR LOANS AND LEASE LOSSES - CHANGE ANALYSIS

	Product Type
	Product
	Organization Structure
	Customer Type
	Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

11 Enterprise Credit Risk Dashboard-New Business

The following table displays the page level filters which apply to all the reports in this page.

Table 23: Parameters in the Page – New Business

Dashboard Name	Enterprise Credit Risk	
Subject Area	Enterprise Credit Risk	
Page Name	New Business	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

The following analysis are displayed as part of the New Business Page:

- New Business Summary
- Top New Business
- New Business Trend

11.1 New Business - Summary

This section describes the parameters of the New Business - Summary Analysis.

Analysis Name	New Business Summary	
Report Level Filters	 Tabular Report: The time period covered by the analysis such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing. Graphical Report: All the dimensions covered by this analysis and time period mentioned above. 	
Analysis Description	This analysis presents the changes in the gross credit exposure during the selected reference period (such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing), along with details of incremental business (GCE) from existing accounts and new accounts, which caused the changes in the GCE. Additionally, it analyzes the percentage composition of incremental business from new and existing accounts, percentage proportion of incremental GCE (new and existing accounts) by product types, products, line of business and other such	

Table 24: New Business Summary Analysis Parameters

	dimensions. The analysis helps identify pockets that have disproportionally contributed to the incremental business during the specified period of analysis.	
	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:	
	• New Business Summary : A multidimensional tabular report displaying the following measures for all listed dimensions and the selected reference period.	
	Opening balance	
	 Net Incremental GCE from Existing Business 	
	 Net Incremental GCE from New Business 	
	Current balance	
	 Percentage of Incremental GCE from Existing Business 	
	 Percentage of Incremental GCE from New Business 	
	 Composition of Incremental GCE from New Business 	
	 Composition of Incremental GCE (Total) 	
	 Incremental GCE from New Business/Current GCE 	
	 Incremental GCE from Existing Business/Current GCE 	
	Total Incremental GCE/Current GCE	
	 Incremental Business (GCE) – Analysis: A combination chart displaying the Incremental GCE from Existing Business, Incremental GCE from New Business, and Total Incremental GCE. Filter and view the data by selecting any one of the massures: 	
Reports Covered		
	All Measures Not Incremental GCE from Existing Business	
	Net Incremental GCE from New Business	
	Total Incremental GCE	
	Current GCE Composition: A stacked column chart displaying Incremental GCE	
	Existing Business as a percentage of Current GCE and Incremental GCE from New Business as a percentage of Current GCE. Filter and view the data by selecting any one of the measures:	
	All Measures	
	 Incremental GCE New Business 	
	 Net Incremental GCE Existing Business Incremental Business (GCE) – Composition: A radar chart displaying the composition of Incremental GCE - Existing Business, Incremental GCE - New Business, and Total Incremental GCE, for the new business garnered during the selected reference period, for a selected combination of dimensions. Filter and view the data by selecting any one of the measures: 	
	All Measures	
	 Net Incremental GCE from Existing Business 	
	 Net Incremental GCE from New Business 	
	Total Incremental GCE	
	Line of Business	
Dimensions	Product Type	
	Product	
	Organization Structure	
	Natural Currency	

Drill-down on	Not Applicable
Drill-down Path	Not Applicable

11.2 Top New Business

This section describes the parameters of the Top New Business Analysis.

Table 25:	Top New	Business	Analysis	Parameters

Analysis Name	Top New Business	
Report Level Filters	 Tabular Report: All the dimensions covered by this analysis, Time Period, and Display Top x (10, 25, 50, 100, 250, 500). Graphical Report: All the dimensions covered by this analysis, Time Period and Display Top x (10, 25, 50, 100, 250, 500). 	
Analysis Description	The analysis provides details of the Top x incremental business from existing as well as new borrowers during the selected period. Additionally, the report analyzes the top incremental business during the selected period in terms of their probability of default and name concentration.	
Reports Covered	 This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: Top Incremental Business - New and Existing Accounts: A tabular report, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new accounts are displayed. The percentage change in GCE is also displayed for the existing accounts. Top Incremental Business - Existing Accounts - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing accounts are analyzed for their credit quality and concentration. Top Incremental Business - New Accounts - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing accounts are analyzed for their credit quality and concentration. Top Incremental Business - New Accounts - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from new accounts are analyzed for their credit quality and concentration. Incremental Business: A horizontal bar chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new accounts are displayed in the decreasing order of incremental GCE. Filter and view the data by selecting any one of the measures: All Measures New Incremental Business - GCE Existing Incremental Business - GCE Total Incremental Business - GCE 	
Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency 	

Drill-down on	Not Applicable
Drill-down path	Not Applicable

11.3 New Business - Trend

This section describes the parameters of the New Business - Trend Analysis.

Analysis Name	New Business Trend	
Report Level Filters	 Tabular Report: All the measures covered by this analysis and periodicity of the trend. Graphical Reports: All the dimensions covered by this analysis and periodicity of the trend. 	
Analysis Description	 This analysis gives a multidimensional view of the past trend of Incremental Business GCE over the last 8 years or 8 quarters or 8 months. The tabular report highlights the Incremental Business GCE and percentage composition of Incremental Business GCE across 8 years or 8 quarters or 8 months. The measures covered in this analysis are: Incremental Business GCE - New Business Accounts Incremental Business GCE - Existing Accounts Total Incremental Business GCE 	
Reports Covered	 This analysis is presented through a combination of tabular and graphical reports, comprising the following: New Business Trend: A multidimensional tabular report displaying the trend of the selected new business measure (Incremental GCE - New Accounts, Incremental GCE Existing Accounts, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months. Incremental Business – Trend: A line chart displaying the trend of all the new business measures (Incremental GCE - New Accounts, Incremental GCE Existing Accounts, and Incremental GCE - New Accounts, Incremental GCE Existing Accounts, and Incremental GCE - New Accounts, Incremental GCE Existing Accounts, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. Incremental Business – Trend of Proportions: A stacked column chart displaying the Incremental business - Trend of Proportions, for a selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected new business measure over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. 	
Dimensions	 Line of Business Product Type Product Organization Structure Natural Currency 	
Drill-down on	Not Applicable	
Drill-down Path	Not Applicable	

12 Enterprise Credit Risk Dashboard-Concentration

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 27: Parameters in the Page – Concentration

Dashboard Name	Enterprise Credit Risk	
Subject Area	Enterprise Credit Risk	
Page Name	Concentration	
Page-Level Filters	 As of Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

The following analysis is displayed as part of the Concentration Page:

<u>Concentration Analysis</u>

12.1 Concentration Analysis

This section describes the parameters of the Concentration Analysis.

Table 28: Concentration Analysis Parameters

Analysis Name	Concentration Analysis
Report Level Filters	 Tabular Report: Not applicable. Graphical Reports: All the dimensions covered by this analysis and Display Top x (10, 25, 50, 100, 250).
Analysis Description	This analysis provides a comprehensive and multidimensional view of the credit concentrations across the enterprise. This analysis enables spotting of credit exposure, delinquency, and default concentrations in the Credit Portfolio of the enterprise, across multiple combinations of dimensions.
Reports Covered	 This analysis is presented through a combination of Tabular and Graphical Reports, consisting of the following: Concentration Analysis: A multidimensional Tabular Report displaying the Gross Credit Exposure Concentration, Delinquent Exposure Concentration and NPA Exposure Concentration across all listed dimensions. The report displays

	the current balance and percentage of total (percentage proportion). Also, based on the dimensions selected a bar chart is populated for concentration analysis. Change the dimensions and apply the selection to view the data.
	 GCE Concentration: A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for GCE concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	• Delinquent Concentration : A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	 NPA Concentration: A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for NPA Exposure concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	Line of Business
	Product Type Product
Dimensions	Organization Structure
	Natural Currency
	Industry
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

13 Enterprise Credit Risk Dashboard-Capital Requirement

The following table displays the Page Level Filters which apply to all the reports in this page.

Table 29:	Parameters	in the	Page – Ca	nital Rec	wirement
Table 23.	r ai airietei s	III UIE	raye – Ca	μπαι πει	unement

Dashboard Name	Enterprise Credit Risk
Subject Area	Enterprise Credit Risk
Page Name	Capital Requirement
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit
Report-Level Filters	 Book Classification Credit Exposure Classification Balance Sheet Classification Legal Entity Line of Business Product Type Product Organization Structure Industry Delinquency Bands Customer Type Natural Currency
Page-Level Display Parameters	Not Applicable

The following analysis are displayed as part of the Capital Requirement Page:

- Capital Requirement Summary
- <u>Capital Holding Summary</u>
- Capital Requirement Trend

13.1 Capital Requirement Summary

This section describes the parameters of the Capital Requirement- Summary Analysis.

Table 30: Capital Requirement Summary Analysis Parameters

Analysis Name	Capital Requirement Summary
Report Level Filters	Tabular Report: Not Applicable.Graphical Report: All the dimensions covered by the analysis.
Analysis Description	This analysis provides a multidimensional view of the capital held against the bank's credit portfolio, through a combination of measures such as EOP Balance, Capital, ALLL, WALGD, WAPD, and Expected Loss.
	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:
	 Capital Requirement Summary: A multidimensional tabular report displaying all the measures such as EOP Balance Total, Capital, Allowance for Loan and Lease Losses, Expected Loss, WALGD, and WAPD, for all the listed dimensions.
	• Capital and Reserves – Summary : A combination chart, where for a given date and selected combination of dimensions, the stacked column chart displays the Capital, Expected Loss and the scatter plot displays the WAPD, WALGD and Capital as a percentage of EOP Balance. You can filter data through the following measures:
Reports Covered	Expected Loss
	Regulatory Capital
	Allowance for Loan and Lease Losses
	 Capital Requirement – Composition: A radar chart displaying the composition or percentage proportion of EOP Balance, Capital, Expected Loss, and ALLL. You can filter the data using the following measures:
	 All Measures
	EOP Balance - Total
	 Expected Loss
	 Allowance for Loan and Lease Losses
	Legal Entity
	Line of Business
Dimensions	Product Type
	Product
	Organization Structure
	Industry Delinguency Bands
	Customer Type
	Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

13.2 Capital Holding Summary

This section describes the parameters of the Capital Holding - Summary Analysis.

Table 31: Capital Holding Summary Analysis Parameters

Analysis Name	Capital Holding Summary
Report Level Filters	Tabular Report: Not applicable.Graphical Report: All the dimensions covered by the analysis.
Analysis Description	This analysis gives a multidimensional view of the capital holding.
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:
	 Capital Holding Summary: A multidimensional tabular report displaying the Tier I Capital, Tier II Capital, Total Capital for all the listed dimensions.
	 Capital Holding - Summary and Composition: A stacked column chart, where for the selected combination of dimensions, the break-up of capital is displayed.
Dimensions	Legal Entity
	Line of Business
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

13.3 Capital Requirement Trend

This section describes the parameters of the Capital Requirement-Trend Analysis.

Analysis Name	Capital Requirement Trend
Report Level Filters	 Tabular Report: All the measures covered in this analysis and periodicity of the trend. Graphical Report: Dimensions covered by this analysis and periodicity of the trend.
Analysis Description	This analysis gives a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. Along with the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period. The measures covered by the analysis are: • EOP Balance - Total • Capital • Allowance for lease and loan and Losses • Expected Loss • WALGD • WAPD • Capital • Capital

	Filter the data based on following Time Period options:
	Yearly
	Quarterly
	Monthly
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, comprising the following:
	 Capital Requirement Trend: A multidimensional tabular report displaying the trend and variance of the selected measure over 8 years or 8 quarters or 8 months.
	 Capital Holding, Expected Loss and Reserves – Trend: A line chart displaying the trend of all measures over the 8 years or 8 quarters or 8 months for a selected combination of dimensions.
	 Capital Holding, Reserves, and Expected Loss – Variance: A line chart displaying the variance of all measures over 8 years or 8 quarters or 8 months for a selected combination of dimensions.
	Legal Entity
	Line of Business
	Product Type
	Product
Dimensions	Organization Structure
	Industry
	Delinquency Bands
	Customer Type
	Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

14 Enterprise Credit Risk Dashboard-Top Exposures

The following table displays the Page Level Filters which apply to all the analysis in this page.

Table 33: Parameters in the Page – Top Exposures

Dashboard Name	Enterprise Credit Risk	
Subject Area	Enterprise Credit Risk	
Page Name	Top Exposures	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

The following analysis is displayed as part of the Top Exposures Page:

• <u>Top Exposures</u>

14.1 Top Exposures

This section describes the parameters of the Top Exposures Analysis.

Analysis Name	Top Exposures
Report Level Filters	 Tabular Report: Dimensions and Measures covered in this analysis, and Top x (provide the relevant value). Graphical Report: Dimensions covered by this analysis, measures mentioned above for sorting the top exposures, and Top x (provide the relevant value).
Analysis Description	This analysis provides a multidimensional analysis of the Top x borrowers of the bank. You can analyze the Top x by various measures such as GCE, EOP Balance, Delinquent Exposures, NPA exposures, and Watchlisted Exposures.
	Additionally, the report analyzes the top exposures in the portfolio against their probability of default, name concentration, and incremental exposure assumed on the borrower in the last one year.
	The report enables you to analyze the credit quality and single name concentration of the banks top exposures and helps analyze how the organization has dealt with increasing the exposures to the top borrowers during the last one year.

Table 34: Top Exposures Analysis Parameters
	This analysis is pres consisting of the fol	ented through a combination of a tabular and graphical reports, lowing:
	Top Exposures dimensions, an displayed along Product Type, F Proportion, EOI	: A tabular report, where for the selected combination of d choice of measure, the Top x borrowers of the bank are g with the details of the borrower's Industry, Line of Business, Product, Organization Structure, Legal entity, Rating, GCE, GCE P Balance, EOP Proportion and PD percentage.
	Top Exposures dimensions, an displayed along the drill down re The following d	E: A horizontal bar graph, where for the selected combination of d choice of measure, the Top x borrowers of the bank are g with the details of the borrower's GCE and EOP Balance. To view eport, click on the graph and then click the Top Exposure Detail . Irill-down reports are displayed with the following columns:
	 Summary or 	f Total exposure
	— Obligor	
	— Obligor	ID
	— PD %	
	— Rating	
	— Credit S	core
	— Watchlis	st Status
	— Credit S	tatus
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.
Paparte Covarad		
Reports Covered	— Onboard	ding Date
Reports Covered	— Onboard	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column.
Keports Covered	— Onboard NOTE — Days Pa	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due
Keports Covereu	— Onboard NOTE — Days Pa — Gross Ci	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure
Keports Covered	— Onboard NOTE — Days Pa — Gross Cu — Gross Cu	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion %
Keports Covereu	— Onboard NOTE — Days Pa — Gross Cu — Gross Cu — EOP Bal	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based
Keports Covered	— Onboard NOTE — Days Pa — Gross Cu — Gross Cu — EOP Bal — EOP Bal	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance – Non Fund Based
Keports Covereu	 Onboard NOTE — Days Pa — Gross Cu — Gross Cu — EOP Bal — EOP Bal — Total EC 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance – Non Fund Based OP Balance
Keports Covered	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance – Non Fund Based OP Balance OP Balance Proportion %
Keports Covereu	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Undraw 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance Proportion % n Amount
Keports Covered	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Undraw Overdue 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance – Non Fund Based OP Balance OP Balance Proportion % in Amount
keports Covered	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Undraw Overdue Allowan 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance Proportion % in Amount e ce for Loan and Lease Losses
Reports Covered	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Undraw Overdue Allowan 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance Proportion % in Amount e ce for Loan and Lease Losses ce for Loan and Lease Loss/ Total EOP Balance
Reports Covered	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Undraw Overdue Allowan Expected 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance Proportion % in Amount e ce for Loan and Lease Losses ce for Loan and Lease Loss/ Total EOP Balance d Loss
	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Undraw Overdue Allowan Expecte Utilization 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance Proportion % in Amount e ce for Loan and Lease Losses ce for Loan and Lease Losses ce for Loan and Lease Loss/ Total EOP Balance d Loss on Percent
Reports Covered	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Total EC Undraw Overdue Allowan Expecte Utilizatio Security 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance OP Balance Proportion % in Amount e ce for Loan and Lease Losses ce for Loan and Lease Losses ce for Loan and Lease Losses con Percent Value
	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal EOP Bal Total EC Total EC Total EC Overdue Allowan Expecte Utilizatio Security Account Lev 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based OP Balance OP Balance Proportion % in Amount e ce for Loan and Lease Losses ce for Loan and Lease Losses ce for Loan and Lease Loss/ Total EOP Balance d Loss on Percent Value vel Detailed Summary
	 Onboard NOTE Days Pa Gross Cu Gross Cu EOP Bal Total EQ Total EQ Total EQ Undraw Overdue Allowan Expecte Utilizatio Security Account Lev Account 	ding Date When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure Proportion % ance - Fund Based ance - Non Fund Based DP Balance DP Balance Proportion % n Amount e ce for Loan and Lease Losses ce for Loan and Lease Losses ce for Loan and Lease Losses ce for Loan and Lease Loss/ Total EOP Balance d Loss on Percent 'Value vel Detailed Summary : Number

	Gross (redit Exposure		
	— Gross Crean Exposure — Top EOP Balance			
	— Undrawn Amount			
	— Overaue			
	— Days Past Due			
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.		
	Watchl	ist Status		
	— Allowa	nce for Loan and Lease Losses		
	— Securit	y Value		
	— Onboa	rding Date		
	NOTE	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column.		
	•			
	Gross Credit B for the selecte GCE of Top x, Balance of Top	Exposure & EOP of Top Exposures : A combination chart, where d combination of dimensions, and choice of measure. The total GCE of Top x/ Total GCE, Total EOP Balance of Top x and EOP o x by Total EOP Balance is displayed.		
	combination o measure for T	op x borrowers of the bank.		
	Top Exposure where for the s Top x exposur in exposure to concentration.	es - Composition by PD, Concentration & Growth: A bubble chart, selected combination of dimensions, and choice of measure, the es of the bank are analyzed for their probability of default, increase the borrower during the last one year and single name		
	 Product Type Product			
	Industry			
Dimensions	Line of Business			
	Organization Structure			
	Legal Entity			
	Natural Currer Pating	псу		
	• Raung			
Drill-down on	Not Applicable			
Drill-down Path	Not Applicable			

15 Wholesale Credit Risk Dashboard-Credit Portfolio Overview

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 25: Daramete	ro in	tha	Daga	Cradit	Dortfolio	Overview
Table 55. Falamete	12 11	uie	raye –	creuit	FULLUIU	Overview

Dashboard Name	Wholesale Credit Risk	
Subject Area	Wholesale Credit Risk	
Page Name	Credit Portfolio Overview	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

The following analysis are displayed as part of the Credit Portfolio Overview Page:

- Credit Portfolio Summary
- Credit Portfolio Inflows and Outflows

15.1 Credit Portfolio Summary

This section describes the parameters of the Credit Portfolio Summary Analysis.

Analysis Name	Credit Portfolio Summary
Report Level Filters	Tabular Report: Not ApplicableGraphical Reports: All the dimensions covered by this analysis.
Analysis Description	 This analysis provides a multidimensional overview of the wholesale credit portfolio, through a combination of key credit measures such as: Number of Borrowers Gross Credit Exposure (GCE) EOP Balance – Fund Based (EOP-FB) EOP Balance – Non-Fund Based (EOP-NFB) EOP Balance Total (EOP-Total)

Table 36: Credit Portfolio Summary Analysis Parameters

	Undrawn Balance
	Non-Performing Assets (NPA)
	 Non-Performing Assets/Total EOP Balance
	Allowance for Loan and Lease Losses (ALLL)
	Allowance for Loan and Lease Losses/Total EOP Balance
	Security Value
	The tabular report supports drill-down to Account Level details such as the Obligor Name, Obligor ID, Asset Classification, Delinquent Status, and Watchlist Status and Rating.
	This analysis is a combination of tabular and graphical reports, consisting of the following:
	 Credit Portfolio - Summary: A multidimensional tabular report displaying all the measures covered by the analysis for all the selected combination of dimensions.
	This report provides a drill-down to Account Level details such as the Obligor Name, Obligor ID, Gross Credit Exposure, EOP Balance, Asset Classification, Delinquent Status, Watchlist Status, and Obligor Rating and so on.
	 Key Credit Metrics: A combination chart where for a given date and selected dimension, the stacked column chart displays the EOP Balance – Total, Undrawn Balance Commitments, NPA/Total EOP Balance, and Allowance for Loan and Lease Loss/Total EOP Balance. The line chart displays the amount and percentage metrics.
	 To view the drill down report, click on the stacked bar chart and then click Key Credit Metrics – Detail option. The detailed report is displayed with the following metrics:
	— Obligor
	— Obligor ID
	— Gross Credit Exposure
	— EOP Balance - Fund Based
Reports Covered	— EOP Balance – Non Fund Based
	— Total EOP Balance
	— Undrawn Amount
	— Overdue
	— Days Past Due
	 — Allowance for Loan and Lease Losses
	— Expected Loss
	— Security Value
	— Utilization Percent
	— PD
	— Rating
	— Credit Score
	— Credit Status
	NOTE Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.

	— Watchlist Status
	 Key Credit Metrics - Composition: A radar chart displaying the composition or percentage proportion of all the measures (except ratios), by a selected dimension.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Collateral type Customer Type Obligor Rating LTV Natural Currency Credit Status (Graphical Report) Watchlist Status (Graphical Report)
Drill-down on	Portfolio Level : In the Credit Portfolio - Summary (Tabular Report) click Natural Currency, to drill-down to the list of obligors represented by the row/portfolio (based on the combination of dimension representing each row).
Drill-down Path	In the Credit Portfolio - Summary (Tabular Report), click Natural Currency to view the Drilldown Report.

15.2 Inflows and Outflows - Fund Based Exposures

This section describes the parameters of the Inflows and Outflows Analysis.

Table 37: Inflows and Outflows Analysis Parameters
--

Analysis Name	Credit Portfolio - Inflows and Outflows - Fund Based Exposures		
Report Level Filters	 Tabular Report: All the measures covered by this analysis and reference period. Line of Business Product Type Product Organization Structure Natural Currency Graphical Reports: All the measures, dimensions and reference periods covered by this analysis. 		
Analysis Description	 This analysis provides a multidimensional view of the change in the selected measure through inflows and outflows during a selected period. The reports in the analysis display the Opening Balance, Inflows, Outflows, Current Balance, Variance Amount (between the opening and closing balance), and Variance In Percentage. The periods covered in this analysis are: Last Reporting Date 		

	 Beginning of the Quarter Beginning of the Month Beginning of the Financial Year Previous year on the Same Day The measures covered in this analysis are: EOP Balance - Total Gross Credit Exposure
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Credit Portfolio – Inflows and Outflows: A multidimensional tabular report displaying the change in the selected measure through inflows and outflows during the selected period. Key Credit Metrics - Inflows and Outflows: A clustered column chart displaying the change in the selected measure through inflows and outflows during the selected period.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Obligor Rating Customer Type Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

16 Wholesale Credit Risk Dashboard-Credit Quality

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 38: Parameters in the Page – Credit Quality

Dashboard Name	Wholesale Credit Risk	
Subject Area	Wholesale Credit Risk	
Page Name	Credit Quality	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

The following analysis are displayed as part of the Credit Quality Page:

- <u>Stressed Assets Classification Summary</u>
- Loan Loss Reserves Summary
- <u>Credit Quality Trend</u>
- <u>Credit Quality Ratio Summary</u>
- Credit Ouality Ratio Trend
- <u>Stressed Assets Change Analysis</u>
- <u>Allowance For Loans and Lease Losses Change Analysis</u>

16.1 Stressed Assets Classification Summary

This section describes the parameters of the Stressed Assets Classification Summary Analysis.

Table 39: Stressed Assets Classification Summary Analysis Parameters

Analysis Name	Stressed Assets Classification Summary
Report Level Filters	Tabular Report: Not ApplicableGraphical Reports: All dimensions covered by this analysis.
Analysis Description	This analysis gives a multidimensional view of the credit quality of the portfolio by displaying how the credit exposure is spread across various stressed asset classes such as:

Watchlisted		
Delinquent - up to 30 DPD		
Delinquent 31-60 DPD		
Delinquent - more than 60 DPD Total Delinguent experience		
Total Delinquent exposures		
NPA - Substandard Assets		
NPA - Doubtful Assets		
NPA - Loss Assets		
Total NPAs		
This analysis is a combination of tabular and graphical reports, consisting of the following:		
 Stressed Assets Classification Summary: A multidimensional tabular report displaying the spread of the credit exposure across various stressed asset classes such as: Watchlisted Delinquent - up to 30 DPD Delinquent 31-60 DPD Delinquent - more than 60 DPD Total Delinquent exposures NPA - Substandard Assets NPA - Doubtful Assets NPA - Loss Assets and Total NPAs This report has drill down capabilities to assess account level details such as the Obligor Name, Obligor ID, Gross Credit Exposure, EOP balance Fund based, EOP Balance Non-Fund Based, EOP Balance – Total, Undrawn Balance, Asset Classification, Days Past Due Date, Obligor Rating and ALLL. 		
 Stressed Assets Classification: A column chart that provides a multidimensional view of the credit quality of the portfolio and its spread across key stressed asset classes such as Watchlisted, Delinquent, and Non-Performing Assets, for the selected combinations of dimensions. You can view the drill-down report by clicking on the graph and selecting the Stressed Asset Classification Detail. The detailed report is displayed with the following metrics: Obligor Obligor ID Gross Credit Exposure EOP Balance - Fund Based Total EOP Balance Undrawn Amount Overdue Days Past Due Allowance for Loan and Lease Losses Expected Loss Security Value 		

— PD	
— Rating	
— Credit	Score
— Credit	Status
ΝΟΤΕ	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.
— Watchl	ist Status
— Total D	elinquent Exposure
— Total N	Ion-Performing Exposure
— Watchl	isted Exposures
Delinquent Examples of the such as Delinquent Examples of the such as Delinquent	(posures Classification : A column chart that provides an in-depth Delinquent Exposure and it's spread across delinquency bands Juent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to and Delinquent Exposure – more than 60 Days DPD, for the Junations of dimensions. To view a drill-down report, click on the n click Delinquent Exposures Classifications . The detailed report ith the following metrics:
— Obligo	r
— Obligo	r ID
— Gross G	Credit Exposure
— EOP Ba	alance - Fund Based
— EOP Ba	alance – Non Fund Based
— Total E	OP Balance
— Undrav	vn Amount
— Overdu	Je
— Days P	ast Due
— Allowa	nce for Loan and Lease Losses
— Expect	ed Loss
— Securit	y Value
Utilizat	ion Percent
— PD	
— Rating	
Credit	Score
— Credit	Status
NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.
	ist Status
Delinqu	uent Exposure Upto 30 days DPD
	uent Exposure 31 to 60 days DPD
Delina	uent Exposure – more than 60 days DPD
Total Delingue	ent Exposure NPA Exposures Classification : A column chart that
provides an in across various	-depth analysis of the Non-Performing Assets and its spread NPA subclasses such as NPA – Sub-Standard Exposure, NPA-

	Doubtful Exposure, and NPA Loss Exposures, for the selected combinations of dimensions. To view a drill-down report, click on the graph and then click NPA Exposure Classification Detail . The detailed report is displayed with the following metrics:		
	— Obligor		
	— Obligor ID		
	- Gross Credit Exposure		
	— EOP Balance - Fund Based		
	— EOP Balance – Non Fund Based		
	— Total EOP Balance		
	— Undrawn Amount		
	— Overdue		
	— Days Past Due		
	 — Allowance for Loan and Lease Losses 		
	— Expected Loss		
	— Security Value		
	— Utilization Percent		
	— PD		
	— Rating		
	— Credit Score		
	— Credit Status		
	NOTE Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted		
	Written Off or current.		
	— Watchlist Status		
	— NPA – Sub -Standard Exposure		
	— NPA -Doubtful Exposure		
	— NPA – Loss Exposure		
	 — Total Non-Performing Assets 		
	Legal Entity		
	Line Of Business		
	Product Type		
	Product		
Dimensions	Organization Structure		
	Industry		
	Obligor Rating		
	Customer Type		
	Natural Currency		
Drill-down on	Portfolio Level: In the Stressed Assets Classification Summary (tabular report), click		
	performing accounts (based on the combination of dimension representing each		
Drill-down Path	In the Stressed Assets Classification Summary (tabular report), click the following cells (measures) to view the drilldown reports:		

	Watchlisted Exposures
	 Delinquent Exposure - Up to 30 days DPD
	 Delinquent Exposure - 31 to 60 days DPD
	 Delinquent Exposure – More than 60 days DPD
	Total Delinquent Exposure
	NPA Sub-standard Exposure
	NPA-Doubtful Exposure
	NPA-Loss Exposure
	Total Non-Performing Assets

16.2 Loan Loss Reserves Summary

This section describes the parameters of the Loan Loss Reserves Summary Analysis.

Analysis Name	Loan Loss Reserves Summary		
	Tabular Report: Not Applicable		
Report Level Filters	Graphical Reports: All dimensions covered by this analysis.		
Analysis Description	This analysis gives a multidimensional view of the credit quality of the portfolio by displaying how the Allowance for Loans and Lease Losses (ALLL) and Net Charge Off (NCO) is spread across various dimensions (line of business, Product Types, Products and such other dimensions). The measures covered by this analysis are ALLL, Provisions, Gross Charge Off, Recoveries from written-off accounts, and Net Charge Off.		
	This analysis is a combination of tabular and graphical reports, consisting of the following:		
	 Loan Loss Reserves Summary: A multidimensional tabular report displaying all the measures such as ALLL, Provisions, Gross Charge Off, Recoveries from written-off accounts, Net Charge Off for all listed dimensions. 		
Reports Covered	 Loan Loss Reserves Key Metrics: A combination, where for a selected combination of dimensions, the Allowance for Loan and Lease Losses (ALLL), Provisions (YTD), Provisions, Gross charge Off (YTD), Recoveries from WO Accounts (YTD), and Net Charge off (YTD) are displayed by the clustered columns, and Provision Ratio, Gross Charge Off Ratio, Net Charge Off Ratio, ALLL - NCO Ratio, Provisions - ALLL Ratio are displayed by the scatter plot. You can filter and view data for any one of the following measures: All Measures 		
	 Allowance for Loan and Lease Losses 		
	 Provisions 		
	Gross Charge Off		
	 Recoveries from WO Accounts 		
	 Net Charge Off 		
	 Loan Loss Reserves - Composition: A radar chart displaying the composition/percentage proportion of all the key measures, for the selected combination of dimensions. You can filter data for the following measures: All Measures 		
	Antificustres		

Table 40: Loan Loss Reserves Summary Analysis Parameters

	 Allowance for Loan and Lease Losses 		
	Provisions		
	 Gross Charge Off 		
	 Recoveries 	from WO Accounts	
	 Net Charge 	Off	
	Legal Entity		
	Line of Busines	55	
	Product Type		
	Product		
	Organization Structure		
	Industry		
	Obligor Rating		
	Customer Type		
Dimensions	Cradit Status		
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted,	
		whiten on or current.	
	 Impaired Asset 	Class	
	Delinquency Bands		
	Natural Currency		
Drill-down on	Not Applicable		
Drill-down Path	Not Applicable		

16.3 Credit Quality – Trend

This section describes the parameters of the Credit Quality Trend Analysis.

Table 41.	Credit Qualit	ty Trend Δ	nalveis F	Parameters
Table 41.	Credit Quali	Ly Trenu A	iiaiysis r	arameters

Analysis Name	Credit Quality – Trend
Report Level Filters	 Tabular Report: Periodicity of the trend and all the measures covered by this analysis. Graphical Reports: All the dimensions covered by this analysis and periodicity of the trend.
	This analysis provides a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. In addition to the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period.
Analysis Description	The measures covered by this analysis are:
	 EOP Balance- Fund Based
	 EOP Balance- Non-Fund Based
	EOP Balance - Total

	Gross Credit Exposure
	Undrawn Balance
	 Watchlisted Exposures
	 Delinquent Exposure - up to 30 days DPD
	 Delinquent Exposure - 31 to 60 days DPD
	 Delinquent Exposure - More than 60 days DPD
	 Total Delinquent Exposures
	 NPA - Sub-Standard Exposure
	 NPA - Doubtful Exposure
	 NPA - Loss Exposure
	 Total Non-Performing Assets
	 Allowance for Loans & Lease Losses
	 Provisions
	 Net Charge Off
	 Gross Charge Off
	This analysis is a combination of tabular and graphical reports, consisting of the
	following:
	• Credit Portfolio and Asset Quality – Trend: A multidimensional tabular report
	displaying the trend of a selected measure over 8 years or 8 quarters or 8
	months.
	Credit Portfolio and Asset Quality – Trend of Variance: A multidimensional
	auarters or 8 months.
	• Key Credit Metrics – Trend : A line chart displaying the trend of EOP Balance-
	Fund Based, EOP Balance- Non-Fund Based, EOP Balance – Total, Gross Credit
	8 months for the selected combinations of dimensions and period.
	 Key Credit metrics – Variance Trend: A line chart displaying the variance of EQP Balance - Fund Based, EQP Balance - Non-Fund Based, EQP Balance -
	Total, Gross Credit Exposure, Total Undrawn Balance, NPA, and ALLL over 8
	years or 8 quarters or 8 months for the selected combinations of dimensions
Reports Covered	and period.
	 Stressed Asset Classification Frend: A line chart displaying the trend of Watchlisted Exposures, Delinquent Exposures up to 30 days DPD, Delinquent
	Exposures 31 to 60 days DPD, Delinquent Exposures more than 60 days DPD,
	Total Delinquent Exposures, NPA- Substandard Exposures, NPA – Doubtful
	Exposures, NPA – Loss Exposures and Total NPA Assets over 8 years or 8
	quarters or 8 months for the selected combinations of dimensions and Period.
	 Stressed Asset Classification – Variance Trend: A line chart displaying the variance of Watchlisted Exposures. Delinquent Exposures up to 30 days DPD
	Delinguent Exposures 31 to 60 days DPD, Delinguent Exposures more than 60
	days DPD, Total Delinquent Exposures, NPA- Substandard Exposures, NPA –
	Doubtful Exposures, NPA – Loss Exposures and Total NPA Assets over 8 years
	or 6 quarters or 8 months for the selected combinations of dimensions and Period.
	Loan Loss Reserves – Trend: A line chart displaying the trend of all the loan
	loss reserves such as ALLL, Gross Charge Off, Recoveries from written-off
	accounts, Net Charge Off and provisions over 8 years or 8 quarters or 8
	months, for the selected combinations of dimensions and period.

	• Loan Loss Reserves – Variance Trend: A line chart displaying the variance of all the loan loss reserves such as ALLL, Gross Charge Off, Recoveries from written-off accounts, Net Charge Off and provisions over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Obligor Rating Customer Type Collateral Type Asset Classification Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

16.4 Credit Quality Ratio - Summary

This section describes the parameters of the Credit Quality Ratio - Summary Analysis.

Analysis Name	Credit Quality Ratio - Summary		
Report Level Filters	Tabular Report: Not applicableGraphical Reports: All the dimensions covered by the analysis.		
Analysis Description	This analysis provides a multidimensional overview of the key credit quality ratios for the wholesale portfolio, through measures such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provisions Ratio, ALLL- NCO Coverage Ratio, Charge Off Ratio and WAPD.		
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Credit Quality Ratio - Summary: A multidimensional tabular report displaying the Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL ratio, ALLL-NPA Coverage ratio, Current Provisions ratio, ALLL- NCO Coverage ratio, Charge Off ratio and WAPD for all the listed dimensions. Key Stressed Asset Ratios: A column chart displaying the key stressed assets ratios such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, and WAPD for the selected combination of dimensions. Key Credit Loss Reserve Ratios: A column chart displaying the key credit loss reserve ratios such as ALLL Ratio, Current Provision Ratio, and Charge off Ratio for the calected combination of dimensions. 		

Table 42: Credit Quality Ratio - Summary Analysis Parameters

	• Key Coverage Ratios : A column chart displaying the key coverage ratios such as ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio for the selected combination of dimensions.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Obligor Rating Customer Type Exposure Band Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

16.5 Credit Quality Ratio – Trend

This section describes the parameters of the Credit Quality Ratio - Trend Analysis.

Table 43: Credit Quality Ratio - Trend Analysis Parameters	
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Analysis Name	Credit Quality Ratio – Trend
Report Level Filters	 Tabular Report: All the measures covered by this analysis and periodicity of the trend. Graphical Reports: All the dimensions covered by this analysis and periodicity of the trend.
Analysis Description	 This analysis gives a multidimensional view of the past trend for a selected ratio over the last 8 years or 8 quarters or 8 months. The measures covered in this analysis are: Watchlist Ratio Delinquent Ratio NPA Ratio ALLL Ratio ALLL-NPA Coverage Ratio Current Provision Ratio Net Charge Off ALLL-NCO Coverage Ratio Charge off Ratio WAPD
Reports Covered	This analysis is a combination of tabular and graphical reports, consisting of the following:

	Credit Quality Ratio – Trend: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters, or 8 months.
	• Rey Credit Quality Ratios - Frend : A line chart displaying the trend of all the measures over the 8 years or 8 quarters, or 8 months for the selected combination of dimensions.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Obligor Rating Customer Type Exposure Band Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

16.6 Stressed Assets - Change Analysis

This section describes the parameters of the Stressed Assets – Change Analysis.

Table 44: Stressed Assets – Change Analysis Parameters
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Analysis Name	Stressed Assets – Change Analysis
Report Level Filters	 Tabular Report: All the measures (such as Watchlisted Exposures, Delinquent Exposures, Non-Performing Assets, NPA Sub-Standard Assets, NPA – Doubtful Assets, NPA – Loss Assets) and Reference Period. Graphical Reports: All the dimensions, measures (stressed asset class) covered by the analysis and Reference Period.
Analysis Description	This analysis provides an understanding of the changes and reasons for changes in the credit exposure to a selected stressed asset class (measure), between a selected reference period and current date. The reference periods covered by this analysis are: Previous Year Beginning of Year Beginning of the Quarter Beginning of the Quarter Beginning of the Month The measures (Stressed Asset Class) covered by this analysis are: Watchlisted Assets Delinquent Assets Non-Performing Assets NPA Sub-Standard Assets NPA Doubtful Assets

	NPA Loss Assets
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Stressed Assets – Change Analysis: A multidimensional tabular report, displaying change and reasons for the changes in exposure to a selected stressed asset class (measure), between a selected reference period and current date. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance.
	• Stressed Assets - Change Analysis (graphical report): A bridge chart that analyzes the change and reasons for the change in exposure to selected stressed asset class (measure), between a selected reference period and current date, for a selected combination of dimensions. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Customer Type Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

16.7 Allowance for Loans and Lease Losses – Change Analysis

This section describes the parameters of the Allowance for Loans and Lease Losses - Change Analysis.

Fable 45: Allowance for	Loans and Lease	Losses - Change	Analysis Parameters
			······································

Analysis Name	Allowance for Loans and Lease Losses - Change Analysis
Report Level Filters	 Tabular Report: Reference period Graphical Reports: Reference period and all the dimensions covered by this analysis.
Analysis Description	 This analysis provides an understanding of the changes and reasons for changes in the ALLL, between a selected reference period and the current date. The reference periods covered by this analysis are Previous Year Beginning of Year Beginning of the Quarter

	Beginning of the Month
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Allowance for Loans and Lease Losses - Change Analysis: A multidimensional tabular report displaying the changes and reasons for changes in the ALLL between a selected reference period and current date. The report displays the Opening Balance of ALL, Net Charge off during the Period, Reserves before Provisions, Provisions made during the period, Other Changes and Current Balance of ALLL. Allowance for Loan and Lease Losses - Change: A bridge chart that analyzes the change and reasons for the changes in the ALLL between a selected
	reference period and current date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge off during the Period, Reserves before Provisions, Provisions made during the period, Other Changes and Current Balance of ALLL.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Customer Type Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

Wholesale Credit Risk Dashboard-Top Exposures 17

The following table displays the Page Level Filters which apply to all the analysis on this page.

Dashboard Name	Enterprise Credit Risk	
Subject Area	Interprise Credit Risk	
Page Name	Top Exposures	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

Table 46: Parameters in the Page – Top Exposures

The following analysis are displayed as part of the Top Exposures Page:

Top Exposures •

Top Exposures 17.1

This section describes the parameters of the Top Exposures Analysis.

able 47: Top Exposures Analysis Parameters		
Analysis Name	Top Exposures	
Poport Loval Filtars	 Tabular Report: Dimensions and measures covered in this analysis and Top x (provide the relevant value). 	
Report Level Filters	 Graphical Report: Dimensions covered by this analysis, measures mentioned above for sorting the top exposures, and Top x (provide the relevant value). 	
	This analysis provides a multidimensional analysis of the Top x borrowers of the bank. You can analyze the Top x by various measures such as GCE, EOP Balance, Delinquent Exposures, NPA exposures, ALLL, and Watchlisted Exposures.	
Analysis Description	Additionally, the report analyzes the top exposures in the portfolio against their probability of default, name concentration, and incremental exposure assumed on the borrower in the last one year.	
	The report enables you to analyze the credit quality and single name concentration of the Banks top exposures and helps analyze how the organization has dealt with increasing the exposures to the top borrowers during the last one year.	

	This analysis is pres consisting of the fol	ented through a combination of a tabular and graphical reports, llowing:
	Top Exposures dimensions, an displayed along Product Type, F Proportion, EO proportion, Exp	s: A tabular report, where for the selected combination of d choice of measure, the Top x borrowers of the bank are g with the details of the borrower's Industry, Line of Business, Product, Organization Structure, Legal entity, Rating, GCE, GCE P Balance, EOP Proportion, LTV, Currency, Rating, ALLL, ALLL bected Loss, YTD Net Charge -Off and PD.
	Top Exposures dimensions, an displayed along To view the dril Exposure Deta	s : A horizontal bar graph, where for the selected combination of d choice of measure, the Top x borrowers of the bank are g with the details of the borrower's GCE, ALLL, and EOP Balance. Il-down report, click on the bar chart and then click the Top il. The following drill-down reports are displayed with the
	following colum	nns:
	 Summary o 	f Total Exposure
	— Obligor	
	- Ubligor % מפ	טו
	— PD %	
	— Credit S	core
	— Credit S	tatus
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinguent, deleted,
Demonstra Conversed		Written Off or current.
Reports Covered	Watchlis	st Status
	— Onboar	ding Date
	NOTE	When there are multiple enhearding dates in the system
	NOTE	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column.
	NOTE	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column.
	NOTE — Days Pa — Gross Ci	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure
	NOTE — Days Pa — Gross Ci — Gross Ci	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion %
	NOTE — Days Pa — Gross C — Gross C — EOP Bal	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based
	NOTE — Days Pa — Gross C — Gross C — EOP Bal — EOP Bal	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based
	NOTE — Days Pa — Gross Cu — Gross Cu — EOP Bal — EOP Bal — Total EC	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based DP Balance
	NOTE — Days Pa — Gross C — Gross C — EOP Bal — EOP Bal — Total EC — Total EC	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based OP Balance OP Balance Proportion %
	NOTE — Days Pa — Gross Cu — Gross Cu — EOP Bal — EOP Bal — Total EC — Total EC — Undraw	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based DP Balance DP Balance Proportion % n Amount
	NOTE — Days Pa — Gross C — Gross C — EOP Bal — EOP Bal — Total EC — Total EC — Undraw — Overdue	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based OP Balance OP Balance P Balance Proportion % n Amount
	NOTE — Days Pa — Gross Cu — Gross Cu — EOP Bal — EOP Bal — Total EC — Total EC — Undraw — Overdue — Allowan	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based OP Balance OP Balance OP Balance Proportion % n Amount e ce for Loan and Lease Loss/ Total EOP Balance
	NOTE — Days Pa — Gross C — Gross C — EOP Bal — EOP Bal — Total EC — Total EC — Undraw — Overdue — Allowan — Expecte	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based OP Balance OP Balance DP Balance Proportion % n Amount e ce for Loan and Lease Loss/ Total EOP Balance d Loss
	NOTE — Days Pa — Gross Ci — Gross Ci — EOP Bal — EOP Bal — Total EC — Total EC — Undraw — Overdue — Allowan — Expecte — Security	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based OP Balance OP Balance OP Balance Proportion % n Amount e ce for Loan and Lease Loss/ Total EOP Balance d Loss Value
	NOTE — Days Pa — Gross C — Gross C — EOP Bal — EOP Bal — Total EC — Total EC — Undraw — Overdue — Allowan — Expecte — Security — Utilizatio	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column. st Due redit Exposure redit Exposure – Proportion % ance – Fund Based ance – Non Fund Based OP Balance OP Balance OP Balance Proportion % n Amount e ce for Loan and Lease Loss/ Total EOP Balance d Loss Value on Percent yel Detail Summary

	— Product	Name		
	— Gross Credit Exposure			
	— EOP Ba	lance – Fund Based		
	— EOP Balance – Non Fund Based			
	— Total E	— Total EOP Balance		
	— Undraw	n Amount		
	— Overdu	e		
	— Days Pa	ast Due		
	— Credit S	itatus		
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.		
	— Watchli	st Status		
	— Allowar	ice for Loan and Lease Losses		
	— Security	/ Value		
	— Origina	tion Date		
	• Gross Credit E for the selected GCE of Top x, 0 Balance of Top	xposure & EOP of Top Exposures : A combination chart, where d combination of dimensions, and choice of measure. The total GCE of Top x/ Total GCE, Total EOP Balance of Top x and EOP x by Total EOP Balance is displayed.		
	Top Exposure combination of measure for To	Proportion : A speedometer chart, where for the selected f dimensions, it shows the proportion (top/total) of the selected op x borrowers of the bank.		
	• Top Exposure where for the s Top x exposure in exposure to concentration.	s - Composition by PD, Concentration & Growth: A bubble chart, elected combination of dimensions, and choice of measure, the es of the bank are analyzed for their probability of default, increase the borrower during the last one year and single name		
	Legal Entity			
	Line of Busines	55		
	Product Type			
	 Product 			
Dimensions	Organization S	tructure		
	Industry			
	Obligor Rating			
	• LIV			
	Natural Curren	cy		
Drill-down on	Not Applicable			
Drill-down Path	Not Applicable			

18 Wholesale Credit Risk Dashboard-Rating Migration and Transition

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 40. Davamatava	in the Deere	Deting Migneti	
Table 48: Parameters	In the Page –	Rating Migratio	on and Transition

Dashboard Name	Wholesale Credit Risk		
Subject Area	Wholesale Credit Risk		
Page Name	Rating Migration and Transition		
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 		
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification		
Page-Level Display Parameters	Not Applicable		

The following analysis are displayed as part of the Rating Migration and Transition Page:

- Rating Migration Analysis
- Rating Transition Probability

18.1 Rating Migration Analysis

This section describes the parameters of the Rating Migration Analysis.

Analysis Name	Rating Migration Analysis		
Poport Loval Filtars	 Tabular Report: Dimensions, measures and period of migration covered by this analysis. 		
Report Level Filters	 Graphical Reports: Dimensions, measures and period of migration covered by this analysis. Additionally, the graphical reports can be viewed by rating. 		
	This analysis presents an in-depth view of the rating migrations in the wholesale credit portfolio during a selected period, using a rating migration matrix.		
Analysis Description	The analysis provides drill down capabilities to access details of obligors whose ratings have changes during the period of analysis.		
	The measures displayed in the rating migration matrix include number of accounts, Gross Credit exposure and EOP Balance.		

Table 49: Rating Migration Analysis Parameters

	This analysis is a combination of tabular and graphical reports, consisting of the following:
	• Rating Migration Matrix : A tabular migration matrix report, displaying the details of rating migration during the selected period, for a selected combination of dimensions. You can access the details of borrowers who have migrated from a specific rating based on the selection to another rating during the given period through a drill-down report.
	 Rating Migration Analysis – Upgrades and Downgrades: A tabular report displaying the Total upgrades, Total downgrades and Total unchanged for a particular rating during the selected period and for a selected portfolio (based on chosen combination of dimensions).
Reports Covered	• Rating Migration Change Analysis: A tabular report that analyses the reasons for change in EOP Balance or Numbers of Accounts or Gross Credit Exposure for a given rating. The report displays the Opening Balance, Incremental Value, Value Migrated in, Value Migrated out, Others and Current Balance of the selected measure, for all ratings in a selected portfolio (based on selected combination of dimensions).
	 Rating Migration Analysis – Upgrades and Downgrades (Graphical Report): A cluster column chart displaying the Total Upgrades, Total Downgrades and Total Unchanged Exposures against the amount for a selected rating during the selected period for a selected portfolio (based on combination of dimensions).
	• Rating Migration Analysis: A cluster column chart displaying the migration of exposures from a selected rating to other ratings against Gross Credit Exposer during a selected period. The report is displayed for a specific portfolio (based on the selected combination of dimensions). The values displayed are based on the measure selected (EOP Balance, GCE or Number of Accounts).
	• Rating Migration Change Analysis (Graphical Report): A bridge chart which analyses the reasons for change in EOP balance or numbers of accounts or GCE for a selected rating against the amount. The report displays the Opening Balance, Incremental Value, Value Migrated in, Value Migrated out, Others and Current Balance for a selected rating during a selected period. The change is displayed for a selected portfolio (based on the selected combination of dimensions).
	Legal Entity Line of Business
	 Line of Business Product Type
Dimensions	Product
	Organization Structure Customer Type
	Natural Currency
	Industry
Drill-down	Click on any cell in the Rating Migration Matrix to access the details of borrowers who have migrated from one rating to another during the given period.
Drill-down Path	Cell in the Rating Migration Matrix

18.2 Rating Transition Probability

This section describes the parameters of the Rating Transition Probability Analysis.

Analysis Name	Rating Transition Probability		
Report Level Filters	Tabular Report: Period in Months.Graphical Reports: Ratings		
Analysis Description	The analysis presents the rating transition probability during a specified future period.		
Reports Covered	 This analysis is presented through a combination of tabular and graphical reports, consisting of the following: Rating Transition Probability: A tabular report that displays the rating transition probabilities for all rating combinations during the selected future period. Rating Transition Probability: A scatter plot graph that displays the rating transition probabilities from the selected rating to other ratings, during the selected future period. 		
Dimensions	Not applicable		
Drill-down	Not Applicable		
Drill-down Path	Not Applicable		

Table 50: Rating Transition Probability Analysis Parameters

19 Wholesale Credit Risk Dashboard-New Business

The following table displays the Page Level Filters which are applicable to all the reports in this page.

Dashboard Name	Wholesale Credit Risk		
Subject Area	Wholesale Credit Risk		
Page Name	New Business		
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 		
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification		
Page-Level Display Parameters	Not Applicable		

Table 51: Parameters in the Page – New Business

The following analysis are displayed as part of the New Business Dashboard:

- New Business Summary
- New Business Trend

19.1 New Business - Summary

This section describes the parameters of the New Business - Summary Analysis.

Table 52. New Dusiness Summary Analysis Parameters	Table	52: Nev	/ Business	Summary	Analysis	Parameters
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Analysis Name	New Business Summary		
Report Level Filters	 Tabular Report: The time period covered by this analysis such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing. Graphical Report: All the dimensions covered by this analysis and time period mentioned above. 		
Analysis Description	This analysis presents the changes in the gross credit exposure during the selected reference period (such as Year to Date (YTD), Quarter to Date (QTD), Month to Date (MTD) and 12 months trailing), along with details of incremental business (GCE) from existing accounts and new accounts, which caused the changes in the GCE.		
	Additionally, it analyzes the percentage composition of incremental business from new and existing accounts, percentage proportion of incremental GCE (new & existing accounts) by product types, products, line of business and other such		

	dimensions. The an contributed to the in	alysis helps identify pockets that have disproportionally neremental business during the specified period of analysis.
Reports Covered	This analysis is press consisting of the fol New Business measures such Net Incremental Incremental GC New Business, Composition of Business/Curree Total Incremen reference perio Incremental GC and Total Incremental GC and GC and Total Incremental GC and Total Incremental GC and Incremental GC and Total Incremental GC and GC an	ented through a combination of a tabular and a graphical report, lowing: Summary: A multidimensional tabular report displaying all the as Opening balance, Net Incremental GCE from Existing Business, I GCE from New Business, Current balance, percentage of E from Existing Business, percentage of Incremental GCE from Composition of Incremental GCE from New Business, Incremental GCE (Total), Incremental GCE from New ent GCE, Incremental GCE from Existing Business/Current GCE, tal GCE/Current GCE for all listed dimensions and the selected d. usiness (GCE) – Analysis: A combination chart displaying the E from Existing Business, Incremental GCE from New Business, mental GCE. Filter and view the data by selecting any one of the s ental GCE from Existing Business ental GCE from New Business hental GCE wn report, click the chart and then click Incremental Business ail. The following columns are displayed:
	 Watchlist Status Days Past Due Origination Dat Gross Credit Ex Gross Credit Ex EOP Balance - EOP Balance - Total EOP Balance Total EOP Balance Undrawn Amou Overdue Allowance for L Expected Loss 	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current. e posure posure posure – Proportion % Fund Based Non Fund Based nce nce Proportion % int oan and Lease Losses oan and Lease Loss/Total EOP Balance

	Security Value
	Utilization Percent
	 Net Incremental GCE from Existing Business
	 Net Incremental GCE from New Business
	• Current GCE Composition: A stacked column chart displaying the Current GCE Composition across Opening GCE, Incremental GCE - Existing Business, and Incremental GCE - New Business percentage, during the selected reference period, across a selected combination of dimensions. Filter and view the data by selecting any one of the measures:
	 All Measures
	 Incremental GCE New Business
	 Net Incremental GCE Existing Business
	 Incremental Business (GCE) – Composition: A radar chart displaying the composition of Incremental GCE - Existing Business, Incremental GCE - New Business, and Total Incremental GCE, for the new business garnered during the selected reference period, for a selected combination of dimensions.
	Legal Entity
	Line of Business
Dimensions	Product Type
	Product
	Organization Structure
	Industry
	Customer Type
	Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

19.2 Top New Business

This section describes the parameters of the Top New Business Analysis.

Analysis Name	Top New Business				
	 Tabular Report: All the dimensions covered by this analysis, Time Period, and Display Top x (10, 25, 50, 100, 250, 500). 				
Report Level Filters	 Graphical Report: All the dimensions covered by this analysis, Time Period and Display Top x (10, 25, 50, 100, 250, 500). 				
	The analysis provides details of the Top x incremental business from existing as well as new borrowers during the selected period.				
Analysis Description	Additionally, the report analyzes the top incremental business during the selected period in terms of their probability of default and name concentration.				
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:				

	 Top Incremental Business - New and Existing Accounts: A tabular report, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new accounts are displayed. The percentage change in GCE is also displayed for the existing accounts. Top Incremental Business - Existing Accounts - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing accounts are analyzed for their credit guality and concentration. 			
	• Top Incremental Business - New Accounts - Quality and Concentration: A bubble chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from new accounts are analyzed for their credit quality and concentration.			
	 Incremental Business: A horizontal bar chart, where for the selected combination of dimensions, period and Top x, the Top x incremental business from existing and new accounts are displayed in the decreasing order of incremental GCE. 			
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Customer Type 			
Drill-down on	Natural Currency Not Applicable			
Drill-down path	Not Applicable			

19.3 New Business - Trend

This section describes the parameters of the New Business - Trend Analysis.

|--|

Analysis Name	New Business Trend				
Report Level Filters	 Tabular Report: All the measures covered by this analysis and periodicity of the trend. Graphical Reports: All dimensions covered by this analysis and periodicity of the trend. 				
Analysis Description	 This analysis gives a multidimensional view of the past trend of Incremental Business GCE over the last 8 years or 8 quarters or 8 months. The tabular report highlights the Incremental Business GCE and percentage composition of Incremental Business GCE across 8 years or 8 quarters or 8 months. The measures covered in this analysis are: Incremental Business GCE - New Business Accounts Incremental Business GCE - Existing Accounts 				

	Total Incremental Business GCE				
	 This analysis is presented through a combination of tabular and graphical reports, comprising the following: New Business Trend: A multidimensional tabular report displaying the trend of the selected new business measure (Incremental GCE - New Accounts, Incremental GCE Existing Accounts, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months. 				
Reports Covered	business measures (Incremental GCE - New Accounts, Incremental GCE Existing Accounts, and Incremental GCE - Total) over 8 years or 8 quarters or 8 months, for the selected combination of dimensions.				
	 Incremental Business – Trend of Proportions: A stacked column chart displaying the Incremental business - Trend of Proportions, for a selected new business measure over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. 				
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Obligor Rating - applicable for Incremental Business GCE – New Accounts measure in the New Business Trend report LTV - applicable for Incremental Business GCE – New Accounts measure in the New Business Trend report Customer Type PD Band - applicable for Incremental Business GCE – New Accounts measure in the New Business Trend report Natural Currency 				
Drill-down on	Not Applicable				
Drill-down Path	Not Applicable				

20 Wholesale Credit Risk Dashboard-Concentration

The following table displays the Page Level Filters which apply to all the analysis on this page.

Dashboard Name	Wholesale Credit Risk			
Subject Area	Wholesale Credit Risk			
Page Name	Concentration			
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 			
Report Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification			
Page-Level Display Parameters	Not Applicable			

Table 55: Parameters in the Page – Concentration

The following analysis are displayed as a part of the Concentration Page:

- <u>Concentration Analysis</u>
- <u>Concentration Trend</u>
- <u>Top Concentration</u>

20.1 Concentration Analysis

This section describes the parameters of the Concentration Analysis.

Table 56: Concentration Analysis Parameters

Analysis Name	Concentration Analysis			
Report Level Filters	 Tabular Report: Not applicable. Graphical Reports: All the dimensions covered by this analysis and Display Top x (10, 25, 50, 100, 250). 			
Analysis Description	This analysis provides a comprehensive and multidimensional view of the credit concentrations across the bank. This analysis enables spotting of credit exposure, delinquency, and default concentrations in the credit portfolio of the bank, across multiple combinations of dimensions.			
Reports Covered	This analysis is presented through a combination of tabular and graphical reports, consisting of the following:			

	 Concentration Analysis: A multidimensional tabular report displaying the concentration by Number of Obligors, concentration by EOP Balance Total, Gross Credit Exposure Concentration, Delinquent Exposure Concentration and NPA Exposure Concentration, across all listed dimensions. The report displays the Current Balance and percentage of total (percentage proportion). Also, a bar chart is displayed with various dimension and measure filters included. To view the filtered data, select the required options and then click Apply. GCE Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for GCE concentration: A bubble chart, where each bubble representing a portfolio. Delinquent Concentration: A bubble chart, where each bubble representing a portfolio. Delinquent Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for the portfolio. Delinquent Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. NPA Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio. NPA Concentration: A bubble chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for NPA Exposure concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
Dimensions	 Legal Entity Line of Business Product Type Obligor Rating Product Organization Structure Asset Classification Collateral Type Maturity Profile Issuer Type Industry LTV Customer Type PD Band Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

20.2 Concentration Trend

This section describes the parameters of the Concentration Trend Analysis.

Table 57: Concentration Trend Analysis Parameters

	Tabular Report: Measures and periodicity of trend covered by this analysis.						
Report Level Filters	 Graphical Report: All the dimensions, measures and periodicity of trend covered by this analysis. 						
Analysis Description	This analysis presents the trend of concentration for the last 8 years or 8 quarters. The measures covered by this analysis are: Number of Accounts Gross Credit Exposure EOP Balance - Fund Based EOP Balance - Non-Fund Based EOP Balance - Total Delinquent Exposure Allowance for Loans and Lease Losses NPA Security Value YTD Provisions YTD NCO						
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Concentration – Trend: A multidimensional tabular report displaying the concentration trend of a selected measure over 8 years or 8 quarters. Concentration – Trend: A line chart displaying the concentration trend of a selected measure over 8 years or 8 quarters, for a selected combination of dimensions. 						
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Industry Obligor Rating LTV Customer Type Exposure Band Natural Currency 						
Drill-down on	Not Applicable						
Drill-down Path	Not Applicable						

20.3 Top Concentration

This section describes the parameters of the Top Concentration Analysis.

Analysis Name	Top Concentration				
Report Level Filters	Graphical Reports: Display Top x.				
Analysis Description	This analysis displays the top GCE, Delinquent, and NPA concentrations across five default combination of dimensions - Product type, Line of Business, Organization Structure, Industry, and Natural Currency. The analysis covers top 10, 25, 50, 100 and 250 portfolio concentrations.				
Reports Covered	 This analysis is presented through graphical reports as under: Top GCE Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for GCE concentration, YoY percentage change in the EOP Balance of the portfolio, and WAPD of the portfolio. Top Delinquent Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for Delinquent concentration. YoY percentage change in the EOP Balance of the EOP Balance of the portfolio, and WAPD of the portfolio. Top NPA Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for Delinquent concentration, YoY percentage change in the EOP Balance of the portfolio, and WAPD of the portfolio. Top NPA Concentration: A bubble chart, where each bubble representing a portfolio combination based on five dimensions covered by this analysis is analyzed for NPA concentration, YoY percentage change in the EOP Balance of the portfolio, and WAPD of the portfolio. 				
Dimensions	 Line of Business Product Type Organization Structure Industry Natural Currency 				
Drill-down on	Not Applicable				
Drill-down Path	Not Applicable				

Table 58: Top Concentration Analysis Parameters

21 Wholesale Credit Risk Dashboard-Group Exposure

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table FOr	Devematere		o Dogo	Crown	Evneeure
i able 55.	rarameters	iii u	e raye –	Group	Exposure

Dashboard Name	Wholesale Credit Risk		
Subject Area	Wholesale Credit Risk		
Page Name	Group Exposure		
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 		
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification		
Page-Level Display Parameters	Not Applicable		

The following analysis are displayed as part of the Group Exposure Page:

• Group Exposure Summary

21.1 Group Exposure Summary

This section describes the parameters of the Group Exposure Analysis.

Analysis Name	Group Exposure
Report Level Filters	 Tabular Report: Top 1000 records based on measures selected. Graphical Reports: Measures (GCE, EOP balance - Fund Based, EOP Balance - Non-Fund Based, EOP Balance - Total, Indirect Exposure, Indirect Exposure, Gross Relationship Exposure, Delinquent Exposure and NPA Exposure) for sorting the group exposures and Display Top x (10, 25, 50, 100).
Analysis Description	This analysis presents the details of the organization's credit exposure to group of connected entities.
Reports Covered	 This analysis is presented through a combination of tabular and graphical reports, consisting of the following: Group Exposure Summary: A multidimensional tabular report displays the list of groups to which the organization has credit exposure to, along with the details of Parent PD, Gross Credit Exposure, EOP Balance, Indirect Exposure,

Table	60. Group	Exposure -	Summary	Δnal	vsis	Parameters
lanc	oo. Oroup	Exposure -	Summary	Allal	yaia	arameters

	 Gross Relationship Exposure, Delinquent Exposure and NPA exposure, for the group. You can filter the data based on measures such as Gross Credit Exposure, EOP Balance – Fund Based, EOP Balance – non Fund Based, EOP Balance Total, Indirect Exposure, Gross Relationship Exposure, Delinquent Exposure, and NPA Exposure. And you can view the first top 10 entries in the report. The report has capabilities of drill down, where you can view the list of entities connected to group and the details of exposure to each of these individual entities, including the Parent Name, Parent ID, Parent PD, Customer Name, Customer ID, Legal Entity, Line of Business, Organization Structure, Industry, Product Type, Product, Obligor Rating, Asset Classification, Obligor PD, Gross Credit exposure, EOP Balance, Indirect Exposure, Gross Relationship Exposure and LTV. There are two types of drill-down reports populated where one is a summary report providing all the details mapping to the parent ID and another Obligor level report providing all the details mapping to Obligor ID and Obligor Name. Top Group Exposures – Credit quality & Concentration: This report analysis the top Group exposures based on the selected measures and Top x. The report consists of a bubble chart where each bubble representing a Group is analyzed for Group exposures concentration (concentration of the selected measure), YoY percentage change in the EOP Balance of the group and PD of the Group. Filter and view the data by selecting from one of the following measures: EOP Balance Gross Credit Exposure A group Exposures: A bar chart that highlights the list (name) of Top x Group exposures in the descending order, based on the selected measure and Top x.
Dimensions	Not Applicable
	Parent ID Level: Click on the Parent ID in the Group Exposure Summary report, you
Drill-down on	can drill-down to subsidiary/ related entity level details.
Drill-down path	Parent ID in the Group Exposure Summary Report.

22 Credit Risk – Trading Book (Derivatives) – Single Counterparty Credit Exposures

The following table displays the Page Level Filters which apply to all the analysis on this page.

Table 61: Parameters in the Page – Single Counterparty Credit Exposures

Dashboard Name	Credit Risk – Trading Book
Subject Area	Credit Risk – Trading Book
Page Name	Single Counterparty Credit Exposures
Page-Level Filters	 As-of-Date Run Run Execution ID Amount in Units
Page-Level Display Parameters	Not Applicable

The following analysis is displayed as part of the Single Counterparty Exposures Page:

• Single Counterparty Exposures

22.1 Single Counterparty Exposures

This section describes the parameters of the Single Counterparty Exposures Analysis.

 Table 62: Single Counterparty Exposures - Analysis Parameters

Analysis Name	Single Counterparty Exposures
Report Level Filters	 Tabular Report: Measures (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) for sorting the single counterparty exposures and Display Top x (Top 10, 25, 50, 100, 250 and 500). Graphical Reports: All Dimensions covered by the analysis, Measures (Exposure
	At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure & Maximum Exposure) covered by the analysis and Display Top x (Top 10, 25, 50, 100, 250 and 500).
Analysis Description	The analysis helps understand the organization's exposure in the trading book to single counter parties. This analysis has drill down capabilities to analyze the exposures at the netting set level for each single counterparty and further analyze exposures to each contract within the netting set.
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Top Single Counterparty Credit Exposures: A tabular report which lists the top x (report level filter) single counterparty credit exposures of the
organization based on selected measure (report level filter), along with the complete details of the obligor such as Legal Entity, Industry, Name, ID of the Obligor. The report also provides the details of the Obligors exposure such as the Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Credit Valuation Adjustment, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure. This report has drill down capabilities. Click the single counterparty's Obligor ID, to drill-down to the Netting Set Agreement – Single Counterparty Credit Exposures and Contract Type (With Missing Netting Set) – Single Counterparty Credit Exposures. Click Netting Set ID to drill-down to the contract level details under the selected netting set of the single counterparty. The Netting Set Agreement – Single Counterparty Credit Exposures drill-down report shows the netting set level details for all the netting agreements/netting sets of the single counterparty along with details of the Obligor such as Name, Obligor ID, Netting ID, Netting Agreement Description, Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Credit Valuation Adjustment, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, at the netting set level. The Contract Type (With Missing Netting Set) – Single Counterparty Credit Exposures report shows the netting set level details for all the netting agreements/netting sets of the single counterparty along with details of the Obligor such as Name, Obligor ID, Netting ID, Netting Agreement Description column without a description, Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Credit Valuation Adjustment, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, at the netting set level. The following details are displayed at the contract level, for each netting set ID of single counterparty: Obligor Name Obligor ID Netting ID Netting Agreement Description Contract ID Contract Type Exposure At Default Gross Credit Exposure Market Value Notional Amount Expected Exposure Expected Positive Exposure Potential Future Exposure Maximum Exposure • Top CCE - Asset Quality and Concentration: A bubble chart that displays the top x (report level filter) single counterparty credit exposures of the organization based on the selected measure (report level filter), selected

combination of dimensions and Display – Top x, where each bubble

representing an obligor/single counterparty is analyzed for concentration of

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	the selected measure, percentage change in the selected measure during the last 30 days and the PD of the obligor/single counterparty.
Dimensions	 Industry Rating Legal entity Product Type
Drill-Down	This report has drill down capabilities. Click the single counterparty's Obligor ID in the Top Single Counterparty Credit Exposures report, to drill-down to Netting set level details for chosen counterparty credit exposure report details for all the netting agreements/netting sets of the selected counterparty credit exposure. Click the Netting ID/Netting Agreement Description at the netting set level, to drill-down to the contract level exposure details (Report: Netting Set Level Details for Chosen Counterparty Credit Exposure) under the selected netting set ID of the single counterparty.
Drill-down Path	In the Top - Single Counterparty Credit Exposures (tabular report), click Obligor ID to view the first drilldown report (Report: Netting Set Level Details for Chosen Counterparty Credit Exposure). In the Netting set level details for chosen counterparty credit exposure (drilldown report), click Netting ID/ Netting Agreement Description to view the second drilldown report (Report: Contract level details (within the netting set) for chosen counterparty credit exposure).

23 Credit Risk – Trading Book (Derivatives) - Group Exposure

The following table displays the Page Level Filters which apply to all the analysis on this page.

T.I.I. 00	D	•			• • • •	-		
l able 63:	Parameters	IN 1	tne	Page –	Group	EXP	posure	3

Dashboard Name	Credit Risk – Trading Book
Subject Area	Credit Risk – Trading Book
Page Name	Group Exposure
Page-Level Filters	 As of Date Run Run Execution ID Amount in Units
Page-Level Display Parameters	Not Applicable

The following analysis is displayed as part of the Group Exposure Page:

• Group of Connected Counterparty Credit Exposures (GCCE)

23.1 Group of Connected Counterparties Credit Exposures (GCCE)

This section describes the parameters of the Group of Connected Counterparties Credit Exposures (GCCE) Analysis.

Table 64: Group of Connected Counterpartie	s Credit Exposures	(GCCE) Analysis Par	ameters
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Analysis Name	Group of Connected Counterparties Credit Exposures (GCCE)
Report Level Filters	 Tabular Report: Measures (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) for sorting the group of connected counterparties and Display Top x (Top 10, 25, 50, 100, 250 and 500). Graphical Reports: Measures (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) covered by the analysis and Display Top x (Top 10, 25, 50, 100, 250, 100, 250 and 500).
Analysis Description	This analysis presents the details of the organization's credit exposure in the trading book to group of connected counterparties. This analysis has drill down capabilities to analyze the list of single counterparty exposures under each group/parent and further analyzes the exposures at the netting set level for each single counterparty and also analyzes exposures to each contract within the netting set

	This analysis is a combination of tabular and graphical reports, consisting of the following:
	• Top Group of Connected Counterparty Exposures : A tabular report which lists the top x (report level filter) group of connected counterparty exposures of the organization based on selected measure (report level filter) and Display top x, along with the complete details of the Group such as Parent Name, Parent ID, Parent Rating.
	The report also gives the details of the Parent/Group exposure such as the Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Credit Valuation Adjustment, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure.
Reports Covered	This report has drill down capabilities. Click the parent ID, to drill-down to the details of all the single counterparty exposures connected to and comprising the parent/group exposures. The details such as the Industry Type, Industry, Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, are also provided for each counterparty connected to and comprising the parent/group. Click the single counterparty's Obligor ID to drill-down to the netting set level details for all netting agreements/netting sets of the single counterparty along with details of the Obligor such as Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Expected Exposure, Expected Positive Exposure, ID to drill-down to the contract level details for all netting set ID to drill Future Exposure and Maximum Exposure. Click the netting set ID to drill-down to the contract level details under the selected netting set of
	the single counterparty. The details such as Obligor Name, Obligor ID, Netting ID, Netting Agreement Description, Contract ID, Contract Type, Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure are displayed at the contract level, for each netting set ID of single counterparty.
	• Top GCCE – Asset Quality and Concentration : A Bubble Chart that displays the top x (report level filter) Group of counterparty credit exposures of the organization based on selected measure (report level filter) and Display – Top x, where each bubble representing a group/parent counterparty (Group of connected counterparties) is analyzed for concentration of the selected measure, percentage change in the selected measure during the last 30 days and the PD of the Parent counterparty.
Dimensions	Not Applicable
Drill-Down	The report has capabilities of drill down. In the Group of Connected Counterparty Credit Exposures (GCCE) report, click the Parent ID to view the list of entities connected to and comprising the parent/group and their single counterparty exposures (Report: Counterparty Credit Exposures linked to Parent).
	Further, CIICK the single counterparty's Obligor ID, to drill-down to the netting set level exposure details for all the netting agreements/netting sets of the single counterparty (Report: Netting Set Level Details for Chosen Counterparty Credit Exposure). Click the Netting ID/ Netting Agreement Description, at the netting set level, to drill-down to the contract level exposure details under the selected netting set of the single counterparty (Report: Contract Level Details (within the netting set) for Chosen Counterparty Credit Exposure).

Drill-down Path	In the Group of Connected Counterparty Credit Exposures (GCCE) (Tabular Report), click Parent ID to view the first drilldown report (Report: Counterparty Credit Exposures linked to Parent).
	In the Counterparty Credit Exposures linked to Parent (Drilldown Report), click Obligor ID to view the second drilldown report (Report: Netting Set Level Details for Chosen Counterparty Credit Exposure).
	In the Netting set level details for chosen counterparty credit exposure (second drilldown report), click Netting ID/Netting Agreement Description to view the third drilldown report (Report: Contract Level Details (within the netting set) for Chosen Counterparty Credit Exposure).

24 Credit Risk - Trading Book (Derivatives) -Portfolio Summary – Obligor Type

The following table displays the Page Level Filters which apply to all the analysis on this page.

Dashboard Name	Credit Risk- Trading Book
Subject Area	Credit Risk- Trading Book
Page Name	Portfolio Summary – Obligor Type
Page-Level Filters	 As of Date Run Run Execution ID Amount in Units
Page-Level Display Parameters	Not Applicable

The following analysis is displayed as part of the Portfolio Summary - Obligor Type Page:

• Portfolio Summary – Obligor Type

24.1 Portfolio Summary- Obligor Type

This section describes the parameters of the Portfolio Summary-Obligor Type Analysis.

 Table 66: Portfolio Summary- Obligor Type Analysis Parameters

Analysis Name	Portfolio Summary- Obligor Type
Report Level Filters	Tabular Report: Obligor TypeGraphical Report: All the dimensions covered by this analysis and Obligor Type.
Analysis Description	The analysis presents the organizations exposures to a selected obligor type. All Obligor types are covered by the analysis. This analysis has drill down capabilities to analyze the single counterparty exposures under each obligor type, exposures at the netting set level for each single counterparty and exposure to each contract within each netting set of a single counterparty.
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Portfolio Summary – Obligor Type: A multidimensional tabular report which displays the Exposure At Default, Gross Credit Exposure, Market Value, Notional Amount, Margin, Credit Valuation Adjustment, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure, for the selected obligor type. The dimension covered here are Legal Entity, Industry, and PD band. This report has drill down capabilities to analyze the single

counterparty exposures under each obligor type, exposures at the netting set level for each single counterparty and exposure to each contract within each netting set of a single counterparty.

- Key Metrics Summary: A clustered column chart that displays the Exposure At Default, Gross Credit Exposure and Market Value for a selected obligor type and selected combination of dimensions based on selected measures Filter and view the data by selecting from one of the following measures:
 - All Measures
 - Exposure At Default
 - Gross Credit Exposure
 - Notional Amount
 - Market Value
 - Expected Exposure
 - Expected Positive Exposure
 - Potential Future Exposure
 - Maximum Exposure
- Key Metrics Composition: A radar chart that displays all the composition of all key measures (Exposure At Default, Gross Credit Exposure, Notional Amount, Margin, Market value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure) for the selected combination of dimensions and obligor type. Filter and view the data by selecting from one of the following measures:
 - All Measures
 - Exposure At Default
 - Gross Credit Exposure
 - Notional Amount
 - Market Value
 - Expected Exposure
 - Expected Positive Exposure
 - Potential Future Exposure
 - Maximum Exposure
- Asset Quality and Concentration: A bubble chart that displays the Single Counterparty exposures of the organization based on selected measure (Exposure At Default, Gross Credit Exposure, Market Value, Expected Exposure, Expected Positive Exposure, Potential Future Exposure and Maximum Exposure - these measures will be report level filters for this report) and Obligor Type, where each bubble representing a single counterparty is analyzed for concentration of the selected measure, percentage change in the selected measure - during the last 30 days and the PD of the Single counterparty. Filter and view the data by selecting from one of the following measures:
 - Exposure At Default
 - Gross Credit Exposure
 - Market Value
 - Expected Exposure
 - Expected Positive Exposure
 - Potential Future Exposure
 - Maximum Exposure

Dimensions	 Legal Entity Industry (Graphical Report) Product Type (Graphical Report)
Drill-Down	 Portfolio Level: On clicking the Legal Entity In the Portfolio Summary – Obligor Type report, you can drill down to the list of single counterparty exposures represented by the row/portfolio (based on the combination of dimension representing each row) (Report: Counterparty Credit Exposures Linked to Chosen Portfolio). Further, in the drill down report click the single counterparty's Obligor ID, to view the netting set level exposure details for all netting agreements/netting sets of the single counterparty (Report: Netting Set Level Details for Chosen Counterparty Credit Exposure). Further, in the second drill down report click Netting ID/ Netting Agreement Description, at the netting set level, to view the contract level exposure details (within the netting set) for Chosen Counterparty Credit Exposure).
Drill-down Path	In the Portfolio Summary - Obligor Type (tabular report), click Legal Entity to view the first drilldown report (Report: Counterparty Credit Exposures Linked to Chosen Portfolio). In the Counterparty Credit Exposures Linked to Chosen Portfolio (drilldown report), click Obligor ID to view the second drilldown report (Report: Netting Set Level Details for Chosen Counterparty Credit Exposure). In the Contract level details (within the netting set) for chosen counterparty credit exposure (second drilldown report), click Netting ID/Netting Agreement Description to view the third drilldown report (Report: Contract Level Details (within the netting set) for Chosen Counterparty Credit Exposure).

25 Retail Credit Risk Dashboard-Credit Portfolio Overview

The following table lists the Page Level Filters which apply to all the analysis on this page.

Dashboard Name	Retail Credit Risk	
Subject Area	Retail Credit Risk	
Page Name	Credit Portfolio Overview	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

The following analysis are displayed as part of the Credit Portfolio Overview page:

- Credit Portfolio Summary
- Credit Portfolio Inflows and Outflows

25.1 Credit Portfolio - Summary

This section describes the parameters of the Credit Portfolio - Summary analysis.

|--|

Analysis Name	Credit Portfolio - Summary	
Report Level Filters	Tabular Report: Not ApplicableGraphical Report: All the dimensions covered by this analysis.	
Analysis Description	 This analysis provides a multidimensional overview of the retail banking book, through a combination of key credit measures such as: Number of Accounts Gross Credit Exposure (GCE) EOP Balance Total (EOP-Total) Overdue Undrawn Balance Commitments 	

	 Non-Performing Assets (NPA)
	 Non-Performing Assets/EOP Balance – Fund Based (NPA percentage)
	Allowance for Loan and Lease Losses (ALLL)
	 Allowance for Loan and Lease Losses/EOP Balance – Fund Based
	Security Value
Reports Covered	 Security Value This analysis is presented through a combination of tabular and graphical reports, consisting of the following: Credit Portfolio Summary: A multidimensional tabular report displaying all the measures covered by the analysis for all the selected combination of dimensions. This report provides a drill-down to Account Level details such as the Obligor Name, Obligor ID, Gross Credit Exposure, EOP Balance, Asset Classification, Delinquent Status, Watchlist Status, and Obligor Rating and so on. Key Credit Metrics: A Combination Chart where for a given date and selected dimension, the stacked column chart displays the EOP Balance – Total, Undrawn Balance Commitments, and the line charts displays the NPA percentage and ALLL percentage. To view a detailed drill-down report, click on the bar graph and select Key Credit Metrics – Detail. The detailed report is displayed with the following metrics: Obligor Obligor Obligor ID Gross Credit Exposure EOP Balance – Fund Based EOP Balance – Fund Based Total EOP Balance Undrawn Amount Overdue Days Past Due Allowance for Loan and Lease Losses Expected Loss Security Value Utilization Percent PD % Rating Credit Status MOTE Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current. Watchlist Status Key Credit Metrics - Composition: A radar chart displaying the composition or percentage proportion of all the key credit measures (except ratios) by a selected measure. You can filter data by selecting one of the following measures:
	EOP Balance – Fund Based
	 EOP Balance – Non Fund Based

CREDIT PORTFOLIO – INFLOWS AND OUTFLOWS – FUND BASED EXPOSURES

	EOP Balance Total
	Gross Credit Exposure
	 Undrawn Balance Commitments
	 Non-Performing Assets
	 Allowance for Loan and Lease Losses
	 Security Value
	 Overdues
	Legal Entity
	Line of Business
	Product Type
	Product
	Organization Structure
	Collateral type
	Customer Type
	• LTV
Dimensions	Natural Currency
	Maturity Profile
	Age on book Band
	Sourcing Channel
	Customer Age Bands
	Exposure Band
	Co-Signer Status
	External Credit Score Bands
	Lien Position
Drill-down on	The tabular report provides drill-down capabilities to account level details.
Drill-down Path	In the Credit Portfolio - Summary (Tabular Report), click Natural Currency to view the Drilldown Report.

25.2 Credit Portfolio – Inflows and Outflows – Fund Based Exposures

This section describes the parameters of the Credit Portfolio – Inflows and Outflows – Fund Based Exposures.

Analysis Name	Credit Portfolio – Inflows and Outflows – Fund Based Exposures		
Report Level Filters	 Tabular Report: All the measures covered by this analysis and reference period. Graphical Reports: All the measures, dimensions and reference periods covered by this analysis. 		
Analysis Description	This analysis provides a multidimensional view of the change in the selected measure through inflows and outflows during a selected period. The reports in the		

Table 69: Credit Portfolio – Inflows and Outflows – Fund Based Exposures Parameters

	 analysis display the Opening Balance, Inflows, Outflows, Current Balance, Variance Amount (between the opening and closing balance), and Variance In Percentage. The periods covered in this analysis are: Last Reporting Date Beginning of the Quarter Beginning of the Month Beginning of the Year Previous Year The measures covered in this analysis are: EOP Balance - Total Gross Credit Exposure
Reports Covered	 This analysis is presented through a combination of a tabular and a graphical report, including the following: Credit Portfolio – Inflows and Outflows – Fund Based Exposures: A multidimensional tabular report displaying the change in the selected measure through inflows and outflows during the selected period. Key Credit Metrics - Inflows and Outflows – Fund Based Exposures: A combination chart where the clustered column displays the change in the selected measure through inflows, outflows, opening balance, current balance and the scatter plot displays the variance percentage during the selected period.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Customer Type Natural Currency Exposure Bands
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

26 Retail Credit Risk Dashboard-Credit Quality

The following table displays the Page Level Filters which apply to all the analysis in this page.

Dashboard Name	Retail Credit Risk	
Subject Area	Retail Credit Risk	
Page Name	Credit Quality	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

Table 70: Parameters in the Page – Credit Quality

The following analysis are displayed as part of the Credit Quality Page:

- <u>Stressed Assets Classification Summary</u>
- <u>Credit Quality Summary</u>
- Credit Portfolio & Asset Quality Trend
- <u>Credit Quality Ratio Summary</u>
- Credit Quality Ratio Trend
- Stressed Assets Change Analysis
- Allowance For Loans and Lease Losses Change Analysis

26.1 Stressed Assets Change Analysis

This section describes the parameters of the Stressed Assets Change Analysis.

Table 71: Stressed Assets Change Analysis Parameters

Analysis Name	Stressed Assets Change Analysis Summary	
Report Level Filters	 Tabular Report: Metric (GCE, EOP Balance & No. of Accounts) Graphical Reports: All dimensions covered by the analysis and Metric (GCE, EOP Balance & No. of Accounts). 	

Analysis Description	 This analysis gives a multidimensional view of credit quality of the portfolio by displaying how the credit exposure is spread across various stressed asset classes such as: Watchlisted Exposures Delinquent Exposure - Up to 30 days DPD Delinquent Exposure 31-60 days DPD Delinquent Exposure - More than 60 days DPD Total Delinquent exposures NPA - Sub-standard Exposure NPA - Loss Exposures Total NPAs YTD Gross Charge Off YTD Foreclosures XTD Perspectives for WO Accounts
	YID Recoveries for WO Accounts This analysis is presented through a combination of a tabular and a graphical report
Reports Covered	 consisting of the following: Stressed Assets Classification Summary: A multidimensional tabular report displaying the spread of credit exposure (GCE, EOP Balance and No. of Accounts) across various types of asset classes such as: Watchlisted Exposures Delinquent Exposure - Up to 30 days DPD Delinquent Exposure 31-60 days DPD Delinquent Exposure - More than 60 days DPD Total Delinquent Exposure NPA - Substandard Exposure NPA - Doubtful Exposure NPA - Doubtful Exposures Total NPAs The report provides details of the following measures YTD Gross Charge Off YTD Foreclosures YTD Recoveries for WO Accounts This report also has drill down capabilities to assess the account level details such as the Obligor Name, Obligor ID, Gross Credit Exposure, EOP Balance – Total, Undrawn Balance, Asset Classification: A clustered column chart that provides a multidimensional view of the credit quality of the portfolio and its spread across key stressed asset scases such as Watchlisted Exposures, Total Delinquent exposures, and Total Non-Performing Assets, for the selected combinations of dimensions. To view the drilled-down report, click a column on the graph and then click Stressed Assets Classification Detail. The following measures are displayed in the report: Obligor ID

- Gross Credit Exposure
- EOP Balance Fund Based
- EOP Balance Non Fund Based
- Total EOP Balance
- Undrawn Amount
- Overdue
- Days Past Due
- Allowance for Loan and Lease Losses
- Expected Loss
- Security Value
- Utilization Percent
- Total Delinquent Exposure
- PD %
- Rating
- Credit Score
- Credit Status

NOTE

Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.

- Watchlist Status
- Delinquent Exposures Classification: A clustered column chart that provides an in-depth analysis of the Delinquent Exposure and it is spread across delinquency bands such as Delinquent exposures - up to 30 Days DPD, Delinquent Exposure – 31 to 60 Days DPD, and Delinquent Exposure – more than 60 Days DPD, for the selected combinations of dimensions. To view a drill-down report, click on the graph and then click Delinquent Exposures Classifications. The detailed report is displayed with the following metrics:
 - Obligor
 - Obligor ID
 - Gross Credit Exposure
 - EOP Balance Fund Based
 - EOP Balance Non Fund Based
 - Total EOP Balance
 - Undrawn Amount
 - Overdue
 - Days Past Due
 - Allowance for Loan and Lease Losses
 - Expected Loss
 - Security Value
 - Utilization Percent
 - Delinquent Exposure Upto 30 days DPD
 - PD %
 - Rating
 - Credit Score
 - Credit Status

NOTE

Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.

- Watchlist Status NPA Exposures Classification: A clustered column chart that provides an in-depth analysis of the Non-Performing Assets and its spread across various NPA subclasses such as NPA – Sub-Standard Exposure, NPA-Doubtful Exposure, and NPA Loss Exposures, for the selected combinations of dimensions. To view a drill-down report, click on the graph and then click NPA Exposures Classification Detail. The detailed report is displayed with the following metrics:
 - Obligor
 - Obligor ID
 - Gross Credit Exposure
 - EOP Balance Fund Based
 - EOP Balance Non Fund Based
 - Total EOP Balance
 - Undrawn Amount
 - Overdue
 - Days Past Due
 - Allowance for Loan and Lease Losses
 - Expected Loss
 - Security Value
 - Utilization Percent
 - NPA Sub-Standard Exposure
 - PD %
 - Rating
 - Credit Score
 - Credit Status

NOTE

Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.

- Watchlist Status
- Foreclosures and Charge Offs Summary: A clustered column chart that
 provides an in-depth analysis of the Foreclosures and Charge Offs summary and
 its spread through measures such as YTD Gross Charge Off, YTD Foreclosures,
 and YTD Recoveries for WO Accounts, for the selected combinations of
 dimensions. To view a drill-down report, click on the graph and then click
 Foreclosures and Charge Offs Detail. The detailed report is displayed with the
 following metrics:
 - Obligor
 - Obligor ID
 - Gross Credit Exposure
 - EOP Balance Fund Based
 - EOP Balance Non Fund Based
 - Total EOP Balance

	 Overdue 		
	 Days Past D 	Due	
	 Allowance f 	or Loan and Lease Losses	
	 Expected L 	OSS	
	 Security Va 	lue	
	 Utilization F 	Percent	
	 Foreclosure 	25	
	 Gross Char 	ge Off	
	 Net Charge 	Off	
	 PD % 		
	 Rating 		
	 Credit Score 	e	
	 Credit Statu 	IS	
	ΝΟΤΕ	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.	
	 Watchlist S^a 	tatus	
	Stressed Asse	ts Composition: A radar chart displaying the composition or	
	percentage pro YTD write offs combination of All Measure	pportion of all the key stressed asset classes, YTD foreclosures, and YTD recovery from Written off accounts, for the selected f dimensions. Filter the data using any one of the measures:	
	 Watchlisted 	l Exposures	
	 Delinquent 	Exposure – up to 30 days DPD	
	 Delinquent 	Exposure – 31 to 60 days DPD	
	 Delinquent 	Exposure – More than 60 days DPD	
	 Total Deline 	quent Exposure	
	NPA -Sub-Sub-Sub-Sub-Sub-Sub-Sub-Sub-Sub-Sub	Standard Exposure	
	NPA -Doub	tful Exposure	
	NPA – Loss	Exposure	
	 Total Non-I 	Performing Assets	
	 YTD Gross 	Charge Off	
	 YTD Forecl 	osures	
	 YTD Recover 	eries	
	 YTD for WC) Accounts	
	Legal Entity		
	Line of Busines	55	
	Product Type		
	Product		
imensions	Organization Structure		
	Customer Type		
	Natural Curren	су	
	4		

Undrawn Amount

• Sourcing Channel

Drill-down on Portfo on an perfor row).	Portfolio Level : In the Stressed Assets Classification Summary (tabular report), click on any cell in table to drill-down to the list of Watchlisted, Delinquent and non-performing accounts (based on the combination of dimension representing each row).		
Drill-down Path In the cells ((• W • D • D • D • D • T • N • N • N • N	Stressed Assets Classification Summary (tabular report), click the following measures) to view the drilldown reports: /atchlisted Exposures elinquent Exposure - Up to 30 days DPD elinquent Exposure - 31 to 60 days DPD elinquent Exposure - More than 60 days DPD otal Delinquent Exposure PA Sub-standard Exposure PA-Doubtful Exposure PA-Loss Exposure		

26.2 Credit Quality - Summary

This section describes the parameters of the Credit Quality - Summary Analysis.

Table 72: Credit Quality - Summary Analysis Parameters

Analysis Name	Credit Quality – Summary	
Report Level Filters	 Tabular Report: Not Applicable All Graphical Reports: All the dimensions covered by this analysis. Overdue/Foreclosures Summary Report: All the dimensions covered by this analysis and Measures (YTD Foreclosures and Overdues). 	
Analysis Description	 This analysis gives a multidimensional view of the credit quality of the retail banking book. The measures covered by this report are: Number of Accounts GCE Total EOP Balance Undrawn Balance YTD Avg Utilization Overdues YTD Provisions YTD Gross Charge Off YTD Recoveries YTD Net Charge Off Allowance for Loans and Lease Losses YTD Foreclosures Security Value 	
Reports Covered	This analysis is presented through a combination of a tabular and a graphical report, including the following:	

	• Credit Quality Summary : A multidimensional tabular report displaying the credit quality of the retail banking book through measures such as Number of accounts, GCE, Total EOP Balance, Undrawn Balance, YTD Avg Utilization, Overdues, YTD provisions, YTD Gross Charge Off, YTD recoveries, YTD Net Charge Off, Allowance for Loans and Lease Losses, YTD Foreclosures, and Security Value, for all the listed dimensions. Filter the below graphical reports based on the dimension and metric options available.			
	 Number of Accounts – Portfolio Summary: A Horizontal Bar chart displaying the number of accounts in the portfolio, for chosen combination of dimensions. 			
	• Loan Loss Reserves Key Metrics: A Clustered column chart summarizing Allowance for Loan and Lease Losses (ALLL) and the how the provisions and charge offs have had an impact on the ALLL of the portfolio, based on chosen combination of dimensions.			
	• Exposure Utilization Summary: A Clustered column chart displaying the limit utilization of the portfolio, based on chosen combination of dimensions.			
	• Exposure Mitigation Summary : A Clustered column chart displaying mitigation by way of security value and ALLL available Vis a Vis the Exiting Exposure.			
	• Key Credit Quality Metrics Composition: A radar chart displaying the composition or percentage proportion of all the key credit quality measures (except ratio) for a chosen Retail Banking Portfolio. You can filter the data based on any one of the following measures:			
	All Measures			
	 Allowance for Loans and Lease Losses 			
	YTD Provisions			
	 YTD Gross Charge Off 			
	YTD Recoveries			
	 YTD Net Charge Off 			
	 Overdues/ Foreclosures Summary: A column chart displaying the YTD Overdues and YTD Foreclosures for a chosen retail banking portfolio. You can filter the data using any one of the following measures: YTD Overdues YTD Foreclosures 			
	Ling of Business			
	Product Type			
	Product			
	Organization Structure			
	Natural Currency			
	Age on book Band			
Dimensions	Watchliet Status			
	 vvaicinisi status Cradit Status 			
	NOTEBased on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.			
	Sourcing Channel			
	LTV Band			

	Collateral Type			
	Customer Age Band			
	Exposure Band			
	External Credit Score Band			
	Delinquency Bands			
	Impaired Asset Class			
Drill-down on	Not Applicable			
Drill-down Path	Not Applicable			

26.3 Credit Portfolio and Asset Quality – Trend

This section describes the parameters of Credit Portfolio and Asset Quality – Trend Analysis.

Analysis Name	Credit Portfolio and Asset Quality – Trend			
	Tabular Report: All measures covered by this analysis and periodicity of the trend. Craphical Paperts 1: All dimensions covered by this analysis and time period.			
Report Level Filters	 Graphical Reports 1: All dimensions covered by this analysis and time period. Graphical Reports 2: All dimensions and measures covered by this analysis and time period. 			
	This analysis gives a multidimensional view of the past trend for a selected measure over the last year, quarter or monthly basis. Along with the actual values of the selected measure, the report also displays the variance in actuals and percentage between each period.			
	Number of Accounts			
	FOP Balance - Total			
	Gross Credit Exposure			
	Undrawn Balance			
	Watchlisted Exposures			
Analysis Description	Delinquent Exposure - Up to 30 days DPD			
	Delinquent Exposure - 31 to 60 days DPD			
	 Delinquent Exposure - More than 60 days DPD 			
	Total Delinquent Exposures			
	NPA - Sub-Standard Exposure			
	NPA - Doubtful Exposure			
	NPA - Loss Exposure			
	Total Non-Performing Assets			
	Allowance for Loans & Lease Losses			
	Provisions			
	Net Charge Off			
	Gross Charge Off			

Table 73: Credit Portfolio and Asset Quality – Trend Analysis Parameters

	Recoveries
	Foreclosed
	Overdues
	This analysis is presented through a combination of tabular and graphical reports, comprising the following:
	 Credit Portfolio and Asset Quality – Trend: A multidimensional tabular report displaying the trend of a selected measure over 8 years or 8 quarters or 8 months.
	 Credit Portfolio and Asset Quality - Trend of Variance: A multidimensional tabular report displaying the variance of a selected measure over 8 years or 8 quarters or 8 months.
	• Key Credit Metrics Trend : A line chart displaying the trend of EOP Balance - Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets, and ALLL over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. Filter the data using any one of the following measures:
	 All Measures
	EOP Balance - Total
	 Gross Credit Exposure
	Undrawn Balance
	 Total Non-Performing Assets
	 Allowance for Loan and Lease Losses
Reports Covered	• Key Credit Metrics Variance Trend: A line chart displaying the variance of EOP Balance – Total, Gross Credit Exposure, Undrawn Balance, Total Non-Performing Assets and ALLL over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. Filter the data using any one of the following measures:
	 All Measures
	EOP Balance - Total
	 Gross Credit Exposure
	Undrawn Balance
	 Total Non-Performing Assets
	 Allowance for Loan and Lease Losses Stressed Assets Classification Trend: A line chart displaying the trend of Watchlisted Exposures, Delinquent Exposures up to 30 days DPD, Delinquent Exposures 31 to 60 days DPD, Delinquent Exposures more than 60 days DPD, Total Delinquent Exposures, NPA-Substandard Exposures, NPA – Doubtful Exposures, NPA – Loss Exposures and Total Non-Performing Assets over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. Filter the data using any one of the following measures:
	 All Measures
	 Watchlisted Exposures
	 Delinquent Exposures – upto 30 days DPD
	 Delinquent Exposures – 31 to 60 days DPD
	 Delinquent Exposures – more than 60 days DPD
	 Total Delinquent Exposures
	 NPA-Sub-Standard Exposure
	NPA - Doubtful Exposure

- NPA Loss Exposure
- Total Non-Performing Assets
- Stressed Assets Classification Variance Trend: A line chart displaying the variance of Watchlisted Exposures, Delinquent Exposures up to 30 days DPD, Delinquent Exposures 31 to 60 days DPD, Delinquent Exposures more than 60 days DPD, Total Delinquent Exposures, NPA Substandard Exposures, NPA Doubtful Exposures, NPA Loss Exposures and Total Non-Performing Assets over 8 years or 8 quarters or 8 months for the selected combinations of dimensions and period. You can filter the data using one of the following measures:
 - All Measures
 - Watchlisted Exposures
 - Delinquent Exposures Upto 30 days DPD
 - Delinquent Exposures 31 to 60 days DPD
 - Delinquent Exposures More than 60 days DPD
 - Total Delinquent Exposures
 - NPA-Sub-Standard Exposure
 - NPA Doubtful Exposure
 - NPA Loss Exposure
 - Total Non-Performing Assets
- Loan Loss Reserves Trend: A Line Chart displaying the trend of all the loan loss reserves such as ALLL, Provisions, Gross Charge Off, Recoveries from written-off accounts, Net Charge Off, Foreclosures and Overdues over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period. You can filter the data using one of the following measures:
 - All Measures
 - Allowance for Loans and Lease Losses
 - Provisions
 - Net Charge Off
 - Gross Charge Off
 - Recoveries from WO Accounts
 - Foreclosures
 - Overdues
- Loan Loss Reserves Variance Trend: A line chart displaying the variance of all the loan loss reserves such as ALLL, Provisions, Gross Charge Off, Recoveries from written-off accounts, Net Charge Off, Foreclosures and Overdues over 8 years or 8 quarters or 8 months, for the selected combinations of dimensions and period. You can filter the data using one of the following measures:
 - All Measures
 - Allowance for Loans and Lease Losses
 - Provisions
 - Net Charge Off
 - Recoveries from WO Accounts
 - Foreclosures
- Overdues

Dimensions

- Legal Entity
- Line of Business

	Product Type	
	Product	
	Organization Structure	
	Customer Type	
	Collateral Type	
	Asset Classification	
	Natural Currency	
	External Credit Score band	
	Occupation Status	
	LTV band	
	Sourcing Channel	
	Customer Age band	
	Delinquency band	
	Lien position	
Drill-down on	Not Applicable	
Drill-down Path	Not Applicable	

26.4 Credit Quality Ratio - Summary

This section describes the parameters of the Credit Quality Ratio - Summary Analysis.

Analysis Name	Credit Quality Ratio - Summary			
Report Level Filters	Tabular Report: Not ApplicableGraphical Reports: All the dimensions covered by this analysis.			
Analysis Description	This analysis provides a multidimensional overview of the key credit quality ratios for the retail banking book, through measures such as: • Watchlist Ratio • Delinquent Ratio • NPA Ratio • ALLL Ratio • ALLL Ratio • ALLL-NPA Coverage Ratio • Current Provision Ratio • Current Provision Ratio • ALLL- NCO Coverage Ratio • Charge Off Ratio • Charge Off Ratio • WAPD • Original Collateral Value/Book Value • Original Collateral Value/Market Value • Utilization Percentage • WAES (Weighted Average External Credit Score).			

Table 74: Credit Quality Ratio - Summary Analysis Parameters

	This analysis is presented through a combination of a tabular and a graphical report, including the following:			
	 Credit Quality Ratio – Summary: A multidimensional tabular report displaying all credit quality ratios such as Watchlist Ratio, Delinquent Ratio, NPA Ratio, ALLL Ratio, ALLL-NPA Coverage Ratio, Current Provisions Ratio, ALLL- NCO Coverage Ratio, Charge Off Ratio, WAPD, Original Collateral Value/Book Value, Original Collateral Value/ Market Value, Utilization percentage, WAES for a chosen portfolio (based on selected combination of dimensions). 			
	 Key Stressed Asset Ratios: A column chart displaying the key stressed assets ratios such as Watchlist Ratio, Delinquent Ratio, and NPA Ratio, for a chosen portfolio (based on selected combination of dimensions). 			
Reports Covered	• Key Credit Loss Reserve Ratios : A column chart displaying the Key Credit Loss Reserve ratios such as ALLL Ratio, Current Provision Ratio, and Charge off Ratio for the selected combination of dimensions.			
	 Key Coverage Ratios: A column chart displaying the key coverage ratios such as ALLL-NPA Coverage Ratio and ALLL-NCO Coverage Ratio for the selected combination of dimensions. 			
	• Mitigant Value Analysis: A combination chart displaying the Mitigant Value analysis through measures such as Original Collateral Value, Market Value and Book Value through cluster columns and the ratios such as Original Collateral Value/Book value and Original Collateral Value/Market Value through scatter plot, for selected portfolio (based on selected combination of dimensions).			
	 Key Credit Quality Metrics: A combination chart displaying the WAPD and Utilization % as cluster columns and WAES as scatter plot for a selected retail banking portfolio (based on selected combination of dimensions). 			
	Legal Entity			
	Product Type			
	Product			
	Organization Structure			
Dimensions	Customer Type			
	Natural Currency			
	Exposure Band			
	Collateral Type			
	External Credit Score Band			
	Age on Book Band			
Drill-down on	Not Applicable			
Drill-down Path	Not Applicable			

26.5 Credit Quality Ratio – Trend

This section describes the parameters of the Credit Quality Ratio - Trend Analysis.

Table 75: Credit Quality Ratio - Trend Analysis Parameters

Analysis Name Credit Quality Ratio - Trend
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Report Level Filters	 Tabular Report: All the measures covered by this analysis and periodicity of the trend. Graphical Report: Key Credit Quality ratios - Trend: All dimensions covered by this analysis and periodicity of the trend. Graphical Report: Credit Quality ratios - detailed trend: All dimensions covered by this analysis, periodicity of the trend and measure for detailed trend report. 			
Analysis Description	This analysis provides a multidimensional view of the past trend for a selected measure over the last 8 years or 8 quarters or 8 months. The measures covered in this analysis are: • Delinquent Ratio • NPA Ratio • Watchlist Ratio • ALLL Ratio • ALLL Ratio • ALLL-NPA Coverage Ratio • Current Provision Ratio • ALLL-NCO Coverage Ratio • Charge Off Ratio • WAPD • Utilization Percentage • WAECS			
Reports Covered	 This analysis is presented through a combination of a tabular and a graphical report, consisting of the following: Credit Quality Ratios - Trend: A multidimensional tabular report displaying the trend of a selected credit quality ratio over 8 years or 8 quarters, or 8 months. Key credit Quality Ratio - Trend: A line chart displaying the trend of measures like Delinquent ratio, NPA ratio, Watchlist ratio, ALLL ratio, Current Provision ratio, ALLL-NPA Coverage ratio, WAPD, Charge-off ratio and Utilization % over 8 years or 8 quarters, or 8 months. You can filter the data using any one of the following measures: All Measures Delinquent Ratio NPA Ratio Watchlist Ratio ALLL - NPA Coverage Ratio WAPD Charge of Ratio Utilization % Key Credit Quality Ratios - Detailed Trend: A Line Chart displaying the detailed trend of the actuals of the selected measure (ratio) with each line representing a portfolio (sub dimension), for 8 years or 8 quarters or 8 months and for the selected combination of dimensions. You can filter the data using any one of the following measures: 			

	 Watchlist Rate 	Watchlist Ratio		
	 ALLL Ratio 	ALLL Ratio		
	Current Provision Ratio			
	 ALL – NPA Coverage Ratio 			
	 ALL – NCO Coverage Ratio 			
	WAPD			
	 Charge of Ratio 			
	 WAECS 			
	 Utilization % 	6		
	Legal Entity			
	Line of Business			
	Product Type			
	Product			
	Organization Structure			
	External credit score band			
	Customer TypeNatural Currency			
Dimensions	Exposure Band			
	Customer age bandLTV band			
Lien position				
	Credit Status			
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.		
Drill-down on	Not Applicable			
Drill-down Path	Not Applicable			

26.6 Stressed Assets - Classification Summary

This section describes the parameters of the Stressed Assets – Classification Summary.

Table 76: Stressed Assets – Classification Summary Parameters

Analysis Name	Stressed Assets – Classification Summary
Report Level Filters	 Tabular Report: All the measures (such as Watch listed Exposures, Delinquent Exposures, Non-Performing Assets, NPA Sub-Standard Assets, NPA – Doubtful Assets, NPA – Loss Assets) and Reference Period. Graphical Reports: All the dimensions, measures (stressed asset class) covered by the analysis and Reference Period.

Analysis Description	 This analysis provides an understanding of the changes and reasons for changes in the credit exposure to a selected stressed asset class (measure), between a selected reference period and current date. The reference periods covered by this analysis are: Previous Year Beginning of Year Beginning of the Quarter Beginning of the Month The measures (stressed asset class) covered by this analysis are: Non-Performing Assets Delinquent Exposures Watchlisted Exposures NPA - Sub-Standard Assets NPA - Loss Assets
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Stressed Assets - Change Analysis: A multidimensional tabular report, displaying change and reasons for the changes in exposure to a selected stressed asset class (measure), between a selected reference period and current date. The report displays the Opening Balance, New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off, and Current Balance. Stressed Assets - Change Analysis (graphical report): A bridge chart that analyzes the change and reasons for the change in exposure to selected stressed asset class (measure), between a selected reference period and current date, for a selected combination of dimensions. The report displays the Opening Balance, Net New Additions, Resolutions, Net Change in EOP Balances of Existing Accounts, Other Change in EOP Balances of Existing Accounts, Net Change in EOP Balances of Existing Accounts, Other Changes, Charged Off and Current Balance.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Customer Type Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

26.7 Allowance for Loans and Lease Losses - Change Analysis

This section describes the parameters of the Allowance for Loans and Lease Losses - Change Analysis.

Table 77: Allowance for Loans and Lease Losses - Change Analysis Parameters

Analysis Name	Allowance for Loans and Lease Losses - Change Analysis
Report Level Filters	 Tabular Report: Reference Period Graphical Reports: Reference period and all the dimensions covered by this analysis
Analysis Description	 This analysis provides an understanding of the changes and reasons for changes in the ALLL, between a selected reference period and the current date. The reference periods covered by this analysis are as follows: Previous Year Beginning of Year Beginning of the Quarter Beginning of the Month
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Allowance for Loans and Lease Losses - Change Analysis: A multidimensional tabular report displaying the changes and reasons for changes in the ALLL between a selected reference period and current date. The report displays the Opening Balance of ALLL, Net Charge Off during the Period, Reserves before Provisions, Provision during the current period, other changes during the current period, and Current balance. Allowance for Loan and Lease Losses - Change: A bridge chart that analyzes the change and reasons for the changes in the ALLL, between a selected reference period and current date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge Off during the Period, Reserves before Provisions, Provision during the current period, other changes during the current period, and Current balance of ALLL, between a selected reference period and current date, for the selected combination of dimensions. The report displays the Opening Balance of ALLL, Net Charge Off during the Period, Reserves before Provisions, Provision during the current period, other changes during the current period, and Current balance.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Customer Type Natural Currency
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

27 Retail Credit Risk Dashboard-Rating Migration and Transition

The following table displays the page level filters which apply to all the analysis on this page.

Table 78: Parameters in the Page – Rating Migration and Transition

Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	Rating Migration and Transition
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification
Page-Level Display Parameters	Not Applicable

The following analysis are displayed as part of the Rating Migration and Transition Page:

- <u>Migration Analysis</u>
- Transition Probability

27.1 Migration Analysis

This section describes the parameters of the Migration Analysis.

Table 79: Migration	Analysis Parameters
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Analysis Name	Migration Analysis
	Tabular Report: Dimensions, Migration Metric, Measure and period of migration covered by this analysis.
Report Level Filters	 Graphical Reports: Dimensions, Migration Metric, Measure and period of migration covered by this analysis. Additionally, for graphical reports values/bands of the chosen migration metric will also be a filter.
Analysis Description	This analysis presents an in-depth view of migrations of credit score bands, utilization bands and delinquency bands in the retail banking portfolio. The migration analysis can be performed for specific portfolios based on chosen combination of dimensions covered by this analysis.

	The analysis provides drill down capabilities to access details of accounts that have migrated during a given period. The migrations covered in this analysis are credit score migrations, delinquency band migrations and utilization band migrations. The measures displayed in the migration matrix include Gross Credit exposure, Total EOP and Number of accounts.
Reports Covered	 This analysis is a combination of tabular and graphical reports, consisting of the following: Migration Matrix: A tabular migration matrix report, displaying the details of migration during the selected period, for a selected combination of dimensions. You can access the details of borrowers who have migrated from a specific credit score, utilization band or delinquency band based on the selection to another during the given period through a drill-down report. Migration Analysis – Upgrades and Downgrades: A tabular report that displays, for a chosen migration metric, the Total upgrades, Total downgrades and Total unchanged during the selected period and for a selected portfolio (based on chosen combination of dimensions). Migration Change Analysis: A tabular report that analyses the reasons for change in exposure or numbers of borrowers or gross credit exposure for a given credit score or exposure band or delinquency band. The report displays the Total opening balance, Incremental value, Value Migrated in, Value Migrated out, others and Current balance for the selected period, selected Migration metric, measure and selected combination of dimensions. Migration Analysis – Upgrades and Downgrades (graphical report): A cluster column chart, where for a chosen migration metric and a chosen band within the migration metric, displaying the Total upgrades, Total downgrades and Total unchanged measure, during the selected period for a selected portfolio (based on combination of dimensions). Migration Analysis: A cluster column chart, where for a chosen migration metric, displaying the Total upgrades, the migration metric and a chosen band within the migration metric, displaying the Total upgrades, Total downgrades and Total unchanged measure, during the selected period, selected portfolio (based on consen combination of dimensions). Migration Analysis: A cluster column chart, where for a chosen migration metric and a chosen band within the migration metric,
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure Customer Type
Drill-down	Natural Currency Click on any cell in the Migration Matrix to access the details of borrowers comprising the cell/migration.
Drill-down Path	In the Migration Matrix (Tabular Report), click the link on the cells to view the migration details.

27.2 Transition Probability

This section describes the parameters of the Transition Probability Analysis.

Analysis Name	Transition Probability
Report Level Filters	Tabular Report: Period in MonthsGraphical Reports: Delinquency Bands
Analysis Description	The analysis presents the delinquency band migration probability during a specified future period.
Reports Covered	 This analysis is presented through a combination of tabular and graphical reports, consisting of the following: Transition Probability Matrix (Delinquency Bands): A tabular report that displays the transition probabilities for all delinquency band combinations during the selected future period. Transition Probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transition probability (Delinquency Bands): A scatter plot graph that displays the transiting the transite plot graph that displays the transite p
	displays the transition probabilities of accounts in a delinquency band to other delinquency bands during the selected future period.
Dimensions	Not Applicable
Drill-down	Not Applicable
Drill-down Path	Not Applicable

Table 80: Transition Probability Analysis Parameters

28 Retail Credit Risk Dashboard-Concentration

The following table displays the Page Level Filters which apply to all the analysis on this page.

Dashboard Name	Retail Credit Risk
Subject Area	Retail Credit Risk
Page Name	Concentration
Page-Level Filters	 As of Date Run Run Execution ID Amount Unit
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification
Page-Level Display Parameters	Not Applicable

Table 81: Parameters in the Page – Concentration

The following analysis are displayed as a part of the Concentration Page:

- <u>Concentration Analysis</u>
- <u>Concentration Trend</u>

28.1 Concentration Analysis

This section describes the parameters of the Concentration Analysis.

Table 82: Concentration Analysis Parameters

Analysis Name	Concentration Analysis
Report Level Filters	 Tabular Report: Not applicable. Graphical Reports: All the dimensions covered by this analysis and Display Top X (10, 25, 50, 100, 250).
Analysis Description	This analysis provides a comprehensive and multidimensional view of the credit concentrations in the retail banking portfolio. This analysis enables spotting of credit exposure, delinquency, and default concentrations in the retail credit portfolio of the bank, across multiple combinations of dimensions.
Reports Covered	 This analysis is presented through a combination of Tabular and Graphical Reports, consisting of the following: Concentration Analysis: A multidimensional tabular report displaying the concentration by Number of Accounts, Gross Credit Exposure, EOP Balance

	Total, Delinquent Exposure, NPA Exposure and Security Value. Also, a bar chart is displayed with various dimensions and measures options. You can filter the data using these options and click Apply to view the filtered data.
	• GCE Concentration : A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for GCE Concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	• Delinquent Concentration : A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for delinquent exposure, concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	 NPA Concentration: A Bubble Chart, where each bubble representing a portfolio combination (based on the selected combination of dimensions) is analyzed for NPA Exposure concentration, YoY percentage change in the EOP Balance, and WAPD of the portfolio.
	• Concentration – Other Key Measures : A radar chart displaying the Number of Accounts, Security Value, and EOP Balance Concentration for a chosen portfolio (by selected combination of dimensions). You can filter the data using one of the following options:
	All Measures
	 No of Accounts
	 Security Value
	EOP Balance - Total
	Line of Business
	Product Type
	Product
	Organization Structure
	Collateral Type
Dimensione	LIV Customer Type
Dimensions	Natural Currency
	External Credit Score Band
	Insurance Coverage Band
	Exposure Band
	Legal Entity
	Maturity Profile
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

28.2 Concentration Analysis - Trend

This section describes the parameters of the Concentration Trend Analysis.

Table 83: Concentration Trend Analysis Parameters

Analysis Name	Concentration Trend
Report Level Filters	 Tabular Report: Measures and periodicity of trend covered by this analysis. Graphical Report: All the dimensions and measures and periodicity of trend covered by this analysis.
Analysis Description	 This analysis presents the trend of concentration for the last 8 years or 8 quarters. The measures covered by this analysis are: Number of Accounts Gross Credit Exposure EOP Balance - Fund Based EOP Balance - Non-Fund Based EOP Balance - Total Delinquent Exposure Allowance for Loans and Lease Losses NPA Security Value YTD Provisions YTD NCO
Reports Covered	 This analysis is a combination of Tabular and Graphical Reports, consisting of the following: Concentration Analysis – Trend: A multidimensional Tabular Report displaying the concentration trend of a selected measure over 8 years or 8 quarters. Concentration – Trend: A line chart displaying the concentration trend of a selected measure over 8 years or 8 quarters, for a selected combination of dimensions.
Dimensions	 Legal Entity Line of Business Product Type Product Organization Structure LTV Customer Type Natural Currency Exposure Bands External Credit Score Band
Drill-down on	Not Applicable
Drill-down Path	Not Applicable

29 Retail Credit Risk Dashboard-New Business

The following table displays the Page Level Filters which are applicable to all the reports in this page.

Dashboard Name	Retail Credit Risk	
Subject Area	Retail Credit Risk	
Page Name	New Business	
Page-Level Filters	 As-of-Date Run Run Execution ID Amount Unit 	
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification	
Page-Level Display Parameters	Not Applicable	

Table 84: Parameters in the Page – New Business

The following analysis are displayed as part of the New Business Dashboard:

- New and Existing Business Summary
- New Business Trend
- New Business Ability to Pay Summary

29.1 New and Existing Business - Summary

This section describes the parameters of the New and Existing Business - Summary Analysis.

Table 85: New and Existing Business Summary Analysis Parameters

	• % of Total (Exi	sting + New Accounts)	
	Gross Credit E	xposure	
	Gross Credit E	xposure % Proportion	
	• % of Total GCE	(Existing + New Accounts)	
	EOP Balance T	otal	
	EOP Balance %	6 Proportion	
	• % of Total EOF	P (Existing + New Accounts)	
	Security Value		
	Security Value	% Proportion	
	• % of Total Sec	urity (Existing + New Accounts)	
	The report also g originated dur	ives similar metrics for existing business (excluding new business ing the reference period).	
	This analysis is pre consisting of the fo	sented through a combination of a tabular and a graphical report, Illowing:	
	 New and Exis displaying all t chosen referen originated dur 	ting Business Summary : A multidimensional tabular report he above listed measures for new business originated during the nee period and existing business (excluding new business ing the reference period) comprising the retail banking portfolio.	
	 New Business credit metrics based on select GCE, EOP bala view the drill-c Key Credit Met Obligor Obligor ID PD % 	- Key Credit Metrics: A clustered column chart displaying the key for new business originated during the selected reference period, ted combination of dimensions. The measures displayed are - nce, Security value and % of new business to the total business. To lown report, click the column chart and then click New Business – trics Details. The report is displayed with the following columns:	
	 Rating 		
	 Credit Scor 	e	
Reports Covered	 Credit Stat 	us	
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.	
	 Watchlist S 	tatus	
	 Days Past 	Due	
	 Onboarding Date 		
	NOTE	When there are multiple onboarding dates in the system, the minimum onboarding date is displayed in the Onboarding Date column.	
	 Gross Cred 	it Exposure	
	 EOP Balan 	ce - Fund Based	
	 EOP Balan 	ce – Non Fund Based	
	 Total EOP 	Balance	
	 Undrawn A 	mount	
	Overdue		
---------------	--		
	 Allowance for Loan and Lease Losses 		
	 Expected Loss 		
	 Security Value 		
	Utilization Percent		
	New Business – Key Metrics Composition: A radar chart displaying the		
	composition of key credit metrics for new business originated during the selected reference period, across selected combination of dimensions. The measures covered are Number of accounts, EOP balance, GCE and Security Value.		
	 New Business – Credit Quality and Concentration: A scatter plot graph displaying GCE proportion of new business to total business and WAPD for each portfolio combination, based on the chosen combination of dimension. 		
	• Existing Business – Key Credit Metrics: A clustered column chart displaying the key credit metrics for existing Business (other new business originated during the selected reference period), across selected combination of dimensions. The measures displayed are - GCE, EOP balance, Security value and % of new business to the total business.		
	 Existing Business – Key Metrics Composition: A radar chart displaying the composition of key credit metrics for existing Business (other new business originated during the selected reference period), across selected combination of dimensions. 		
	Legal Entity		
	Line of Business		
	Product Type		
	Product		
	Organization Structure		
	Natural Currency		
	External Credit Score Band		
	Co-signor Status		
	LTV Band		
Dimensions	Occupation Status		
Dimensions	Sourcing Channel		
	Collateral Type		
	Customer Age Band		
	Credit Status		
	NOTE Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.		
	Income Band		
	Maturity Profile		
Drill-down on	Portfolio Level : In the New and Existing Business Summary, click Natural Currency in each row to drill-down to access the details of existing or new obligors (as the case may be) represented by the row/portfolio (based on the combination of dimension representing each row).		

Drill-down Path

In the New and Existing Business Summary (Tabular Report), click Natural Currency to view the Drilldown Report.

29.2 New Business - Trend

This section describes the parameters of the New Business - Trend Analysis.

fable 86: New Business	Trend Analysis	Parameters
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Analysis Name	New Business Trend		
Report Level Filters	 Tabular Report: All the measures covered by the analysis and periodicity of the trend. Graphical Reports: New Business - Trend and New Business - Trend of Variance: All the dimensions and time period covered by this analysis. Graphical report: New Business - detailed trend and New Business - Trend of Proportions: All the dimensions, time period and measures covered by this analysis. 		
Analysis Description	 This analysis gives a multidimensional view of the past trend of the new business trend for over the last 8 years or 8 quarters or 8 months. The tabular report highlights the actual, percentage composition and variance of the key new business measures across 8 years or 8 quarters or 8 months, for new business The measures covered in this analysis are: Number of Accounts EOP Balance Gross Credit Exposure Net Charge Off 		
Reports Covered	 This analysis is presented through a combination of tabular and graphical reports, comprising the following: New Business Trend (Tabular Report): A multidimensional Tabular Report displaying the trend of New Business EOP, GCE, Number of New Accounts and NCO of New Business, over 8 years or 8 quarters or 8 months. The trend of actuals, proportions and variance between periods is displayed in the tabular report. New Business – Trend (Graphical Report): A line chart displaying the trend of GCE, EOP Balance, Number of accounts and NCO for New Business, over 8 years or 8 quarters or 8 months. The trend of GCE, EOP Balance, Number of accounts and NCO for New Business, over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. New Business – Trend of Variance: A line chart displaying the trend of variance of GCE, EOP Balance, number of accounts and NCO for new business over 8 years or 8 quarters or 8 months, for the selected combination of dimensions. New Business – Detailed Trend: A line chart displaying the detailed trend of GCE, EOP Balance, Number of accounts and Net Charge off for new business, over 8 years or 8 quarters or 8 months. Based on the selected dimension, the trend report will display one trend line for each sub-dimension (portfolio). New Business – Trend of Proportions: A stacked column chart displaying the composition of new business across chosen dimension values (products, line of business etc.), over 8 years or 8 quarters or 8 months. The measures covered are GCE, EOP Balance, and Number of accounts and Net Charge Off. 		

	Line of Busines	55			
	Product Type				
	 Product 	Product			
	Organization S	tructure			
	Natural Curren	су			
	External Credit	Score Band			
	 Delinquency Base 	and			
Dimensions	 Income Band 				
	Credit Status				
	NOTE	Based on the account status the Credit Status categorizes the status as impaired, delinquent, deleted, Written Off or current.			
	Watchlist Statu	S			
	LTV Band				
Drill-down on	Not Applicable				
Drill-down Path	Not Applicable				

29.3 New Business – Ability to Pay - Summary

This section describes the parameters of the New Business – Ability to Pay Summary Analysis.

Analysis Name	New Business Ability to Pay Summary
Report Level Filters	Tabular Report: Reference PeriodGraphical Reports: All the dimensions and period covered by this analysis.
Analysis Description	This analysis provides an in-depth analysis of the spread of new business by their ability to service the loans.
	This analysis is presented through a combination of tabular and graphical reports, comprising the following:
Reports Covered	 New Business Ability to Pay Summary: A multidimensional Tabular Report displaying spread of new business by their ability to pay ratios. The new business is presented by using measures such as Number of accounts, GCE and EOP balance.
	• New Business – Ability to Pay and Liquidity Analysis: A combination chart which displays the spread of New Business GCE, EOP Balance and no of new accounts (originated during a chosen reference period) across different bands of a chosen ability to pay metric. The measures such as GCE and EOP balance is show as clustered columns and number of accounts are shown as scatter plot.
	 New Business – Ability to Pay Composition: A radar chart that displays the percentage spread of new Business GCE, EOP balance and Number of new accounts (originated during a chosen reference period), across chosen ability to pay metric.

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rable	o/: new	Dusiness) Pav	Summary	/ Anan	vsis i	Paramete	rs

Dimensions	 Product Type Products EMI/CI Band EMI/Residual Income Band EMI/Net Worth Band EMI/Household Income Band Loan/Value of Primary Security Band Debt/Income Band
	LTV Band
Drill-down on	Not applicable
Drill-down Path	Not applicable

30 Retail Credit Risk Dashboard-Collections

The following table displays the Page Level Filters which are applicable to all the reports in this page.

Dashboard Name	Retail Credit Risk		
Subject Area	Retail Credit Risk		
Page Name	Collections		
Page-Level Filters	 As of Month Run Run Execution ID Amount Unit 		
Report-Level Filters	Book ClassificationCredit Exposure ClassificationBalance Sheet Classification		
Page-Level Display Parameters	Not Applicable		

Table 88: Parameters in the Page – Collections

The following analysis are displayed as part of the Collections dashboard:

<u>Collections</u>

30.1 Collections

This section describes the parameters of the Collections Analysis.

Table 89: Collections Analysis Parameters

Analysis Name	Collections
Report Level Filters	 Tabular Report: Not applicable Graphical Report: All the dimensions and measures (delinquent exposures, overdue, number of delinquent accounts and average DPD) covered by this analysis. Line of Business Product Type Product Organization Structure Delinquency Band
Analysis Description	This analysis presents the details of monthly collections in delinquent accounts.

	This analysis is presented through a combination of a tabular and a graphical report, consisting of the following:		
Reports Covered	• Collections: A multidimensional Tabular Chart displaying details of collections made in delinquent accounts during a selected period. The report additionally displays the collection effective rate and average time to collections.		
	• Collections Overview: A cluster column chart that displays the amount collected and the number of accounts collected during a selected period, across selected combination of dimensions.		
	 Collections Detailed Summary: A stacked column chart that displays the principle and interest break up of amount collected during the selected period, across selected combination of dimensions. 		
	• Collections Performance Summary: A combination chart that displays the average time to collections and collections effective rate for the collections made during the chosen period, across selected combination of dimensions.		
	Line of Business		
	Product Type		
Dimensions	Product		
	Organization Structure		
	Delinquency Bands		
Drill-down on	Not applicable		
Drill-down Path	Not applicable		

31 Performance Related Configurations

Follow the below steps for setting performance related configurations for OFS CRA:

1. Parameter Settings OracleDB Configuration File

OFSAAI provides enabling of Parallelism and setting of DOP for every DML sessions invoked by the applications. These parameters are listed in the OracleDB Configuration file (OracleDB.conf) located in the DB layer of the OFSAAI Installation. Navigate to the path \$FIC_HOME/ficdb/conf, to access the file. Modify the values for the below parameters

```
CNF_PARALLEL_QUERY=ENABLE
CNF_PARALLEL_DML=ENABLE
CNF_DEGREE_OF_PARALLELISM=2
CNF_PARALLEL_DEGREE_POLICY=MANUAL
```

NOTE The CNF_DEGREE_OF_PARALLELISM value can be 40% of the available parallel threads per CPU on the database server.

- 2. Parameter Settings for SETUP_MASTER Table
 - **a.** In the SETUP_MASTER table in the atomic schema, update the below mentioned component codes:

```
PARAMNAME PARAMVALUE
DT_PARALLEL_ENABLE Y
DT_PARALLEL_DOP 2
```

NOTE The component value set against the component code DT_PARALLEL_DOP should be same as the CNF_DEGREE_OF_PARALLELISM parameter value set in the OracleDB configuration file as mentioned in step 1 Parameter Settings for OracleDB Configuration File.

- **b.** Enable the gather stats by setting the component code "GATHER_TABLE_STATS" as "Y" in the setup_master table.
- **c.** Update the atomic schema name for the component code "GATHER_STAT_OWNER" in the setup_master table.

NOTE	You can turn-off the configuration, by disabling the gather
	stats by setting the component code "GATHER_TABLE_STATS"
	as "N" in setup_master table.

- 3. Parameter Settings for Configuration Table
 - **a.** In the configuration table in Config Schema, update the below mentioned Component Code:

PARAMNAME PARAMVALUE

QRY_OPT_USE_ROWID Y

4. Partition the table FCT_CREDITRISK_ACCOUNT_SUMMARY based on the n_run_skey.

32 Appendix A: User Configuration and Settings

This section includes information about the User Configurations and Settings.

32.1 Standard Reclassifications

The regulatory guidelines specify classifications and computations based on certain generic product, party and Line of Business (LOB) types. Each bank, internally, will have its own product, party and LOB types, which differ from bank to bank. In order to ensure consistency in computations, the application supports three standard dimensions:

- Standard Product Type
- Standard Party Type
- Standard Line of Business

The bank specific product, party and LOB types, which are accepted as a download in the staging tables, are required to be reclassified to standard product, party and LOB types supported by OFS CRA respectively.

32.1.1 Standard Product Type Reclassification

Banks should map their specific product types to the Standard Product Types as part of the rule CRA -Standard Product Type Reclassification. The application then reclassifies the bank product types to Standard Product Types and utilizes the Standard Product Types for further processing.

32.1.2 Standard Party Type Reclassification

Banks are required to map their specific party types to the Standard Party Types as part of the rule CRA - Standard Party Type Reclassification. The application then reclassifies the bank party types to Standard Party Types and utilizes the Standard Party Types for further processing. Party types include customer type, issuer type and guarantor type.

32.1.3 Standard Line of Business Reclassification

Banks are required to map their specific Line Of Business (LOB) to the Standard LOB as part of the rule CRA - Standard Line of Business Reclassification. The application then reclassifies the bank LOB to Standard LOB and utilizes the Standard LOB for further processing. LOB types include Retail Banking, Private Banking, and Corporate Finance and so on.

33 Glossary

Allowance for Loans and Lease Losses (ALLL)

The Allowance for Loan and Lease Losses, originally referred to as the reserve for bad debts, is a valuation reserve established and maintained by charges against a bank's operating income. It is an estimate of uncollected amounts used to reduce the book value of loans and leases to the amount a Bank can expect to collect. The ALLL is an accounting estimate of probable but unconfirmed asset impairment that has occurred in the loan portfolio as of the Financial Statement Date. All confirmed losses must be charged off.

Asset Classification

According to the farm credit administration, assets are classified as Acceptable, Other Assets Especially Mentioned, Substandard, Doubtful, and Loss.

EOP Balance (Total)

EOP is the balance outstanding amount due from the account/exposure as of date. It can also be termed as principal outstanding or net outstanding. It is inclusive of charges and fees.

EOP Balance - Fund Based

EOP is the balance outstanding amount due from all accounts representing on-balance sheet exposures as on a given date. It can also be termed as principal outstanding or net outstanding. It is inclusive of charges and fees.

EOP Balance Non-Fund Based

EOP is the balance outstanding amount due from all accounts representing off-balance sheet exposures as on a given date.

Carrying Cost

The carrying cost of exposure is the sum of the outstanding amount, interest (accrued or otherwise), and charges, if any, associated with the exposure.

Watchlist Exposures

EOP Balance of all exposures which are classified/marked as watchlist by the bank for reasons pertaining to the borrower's loan performance, business environment, or such other reasons

Doubtful Assets/Exposures

Doubtful assets have all the weaknesses of assets classified as substandard when the weaknesses make collection or liquidation in full, based on available current information, highly questionable, or improbable. It is a class of Non-Performing Assets (NPA).

Gross Credit Exposure (GCE)

GCE is the summation of the balance outstanding, accrued interest, and the complete unutilized portion of the exposure (without any credit conversion factors). The balance outstanding is the principal outstanding of the exposure, plus any charges or fees associated with the exposure.

Gross Relationship Exposure (GRE)

This would be the aggregation of GCE, DSE, indirect exposures, and related exposures.

Indirect Exposure

This would be the value of the guarantees that are provided by a customer, to an entity that is not part of the same legal organization structure as the customer.

Legal Entity Identifier

Legal Entity Identifier is a unique identifier of an entity (both individual and artificial judicial entity). The attribute is similar to the PAN (Permanent Account Number) or a Social Security Number in the case of an individual.

LGD

Loss Given Default is the magnitude of likely loss on the exposure and is expressed as a percentage of the exposure. Loss Given Default is facility specific as such losses are generally understood to be influenced by key transaction characteristics such as the presence of collateral and the degree of subordination.

Loss Asset

Assets classified as loss are considered uncollected and of little value. Therefore, their continuance as bankable assets is not warranted. Amounts classified as a loss should be promptly charged off. This classification does not mean that there is no recovery or salvage value, but rather that it is not practical or desirable to defer writing off these assets, even though some value may be recovered in the future.

Loan-To-Value (LTV) Ratio

The loan-to-value (LTV) ratio expresses the amount of a first mortgage lien as a percentage of the total appraised value of the real property. It is the ratio of the loan to the value of security offered for the loan.

Non-Performing Assets (NPAs)

NPA is a loan or lease that is not meeting its stated principal and interest payments for a specified period. Banks usually classify as nonperforming assets any loans which are more than 90 days overdue. More generally, an asset that is not producing income. The Non-Performing Assets are further classified into substandard assets, doubtful assets, and loss assets.

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PD

The Probability of Default represents the likelihood of the borrower defaulting on the loan obligations.

Substandard Assets

Substandard assets are inadequately protected by the current sound worth and paying capacity of the obligor or the collateral pledged if any. Assets so rated have well-defined weaknesses that may trouble the liquidation of the debt and present the distinct possibility that the institution will sustain some loss if deficiencies are not corrected. It is a class of Non-Performing Assets (NPA).

Weighted Average Probability of Default (WAPD)

The WAPD is to be calculated by multiplying the PD of exposure with the sum of (outstanding amount and accrued interest) and dividing the product by the sum of the (outstanding amount and accrued interest). WAPD = PD * (Sum of (outstanding amount+ accrued interest)) / (Sum of (outstanding amount + accrued interest)).

Undrawn Exposure or Undrawn Balance Commitments

The part of the Gross Credit Exposure that is approved for the borrower but is yet to be disbursed by the bank and availed/drawn by the borrower. This can comprise of both on the balance sheet/fund based and off-balance sheet/non-fund based exposures.

Balance Previous Year

The Balance of any selected measure as of the same day of the previous fiscal year.

Balance Beginning of the Year

The Closing balance of any selected measure as of the end of the previous fiscal year or the opening balance of any selected measure as of the beginning of the current fiscal year.

Balance Last Reporting Date

The balance of any selected measure as of the date of which the subject report was last generated and reported.

OFSAA Support

Raise a Service Request (SR) in <u>My Oracle Support (MOS)</u> for queries related to the OFSAA applications.

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