EU Financial Market Regulatory Reporting Solutions

Riga, 26 February 2014

Wolters Kluwer
Financial Services

When you have to be right

Wolters Kluwer Financial Services

Regulatory reporting in EU

By Hervé Jager

Wolters Kluwer
Financial Services

When you have to be right

Why?

- CRD IV (CRR – Capital Requirements Regulation):
  - Requirement for banks to hold more and better capital
  - Supervisors have more powers to monitor banks more closely
  - Single rule book for Banking regulation
  - Implement Liquidity Regime

- Single rulebook reporting
  - More efficiency for institutions
  - More convergence of supervisory practices
  - Instantiate single rulebook enhancing regulatory harmonisation
  - Uniform formats, frequencies and dates of prudential and Financial reporting and IT solutions
  - Helps to evaluate the risks to which these institutions are or might be exposed to

Who is impacted by Basel III?

- Basel committee rules applies to
  - Internationally active banks at every tier of their organisation
  - Most national authorities impose Basel III on domestic banks too
  - Basel accord also applies to securities and investment firms
  - Shadow banking entities face restrictions

- Jurisdictions that are implementing Basel III
  - All G-20 members
  - All of the EU
  - Many outside of the above

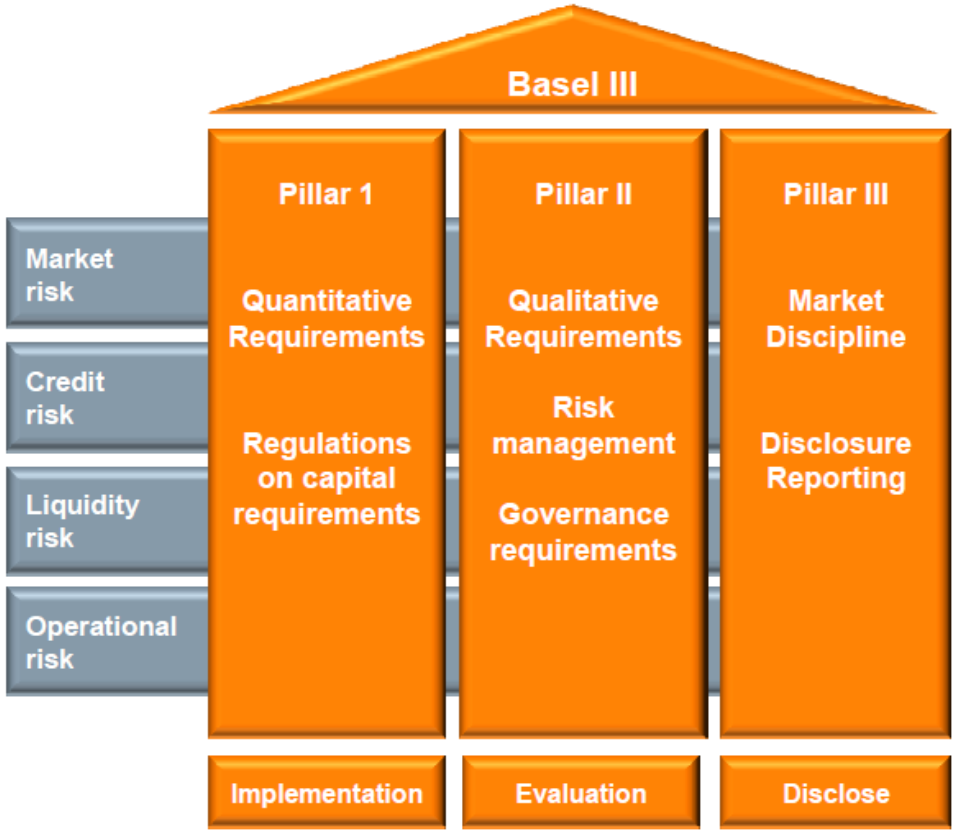
➔ Every tier, every banking sector!

Europe's CRD IV/CRR

- Legal instrument implementing Basel III in the EU
- A single rulebook for all 28 EU countries
- Introduces the Data Point Model data
- Implements XBRL

Reminder: 3 pillars

Under Basel III, the structure remains similar



Reminder: Pillar I components

- Basel II and III are based on the same structure:

$$Capital\ ratio = \frac{Own\ funds}{Risk\ Weighted\ Assets}$$

Credit Risk RWA

+ Market Risk RWA (Capital requirement X 12,5)

+ Operational Risk RWA (Capital requirement X 12,5)

- Basel III pillar 1 cover new areas:
  - Liquidity: migration from pillar 2 with new ratios:
    - LC with minimum standard starting in 2015
    - SF with minimum standard starting in 2018
  - Leverage ratio with minimum standard starting in 2018

Calculation and reporting starting in 2014 !

Reminder: Pillar I Credit risk

Institutions can choose between 2 approaches to measure their Credit Risk RWA...

- Standardised
  - Mostly relying on ratings from external credit rating agencies
  - “Easy” to implement but capital requirements are conservatives
- Internal Rating Based
  - Own estimates of risk parameters
  - Greater risk sensitivity

... and they can use Credit Risk Mitigants (CRM) to decrease their Credit Risk (Collateral, netting, guarantees, credit derivatives)

What is NEW? (Basel III vs Basel II)

- Credit Valuation Adjustment (CVA) – Standardized and Advanced
- New Leverage ratio
- Capital Structure
- Liquidity framework and ratio's (LC/SF)
- Central Counterparties (CCPs)
- Adjustments to P3 – disclosures (COREP, etc)
- Conservation buffer
- Capital Buffers
- Systemically important FI

What is NEW? Pillar I Credit Risk

- Exposure measurement is very similar to Basel II
- RW
  - Standardised
    - Less national discretion to determine risk weight in particular for institutions
    - Deeper measurement for risk weighting property
    - Incentives and obligations for more OTC derivatives to be cleared through a Central Counterparty (CCP)
  - Internal Rating Based
    - Stronger capital requirement for large and unregulated financial entities
- Light changes in CRM

What is NEW? Liquidity Coverage (LC)

- What?
  - This standard aims to ensure that a bank maintains an adequate level of unencumbered, high-quality liquid assets that can be converted into cash to meet its liquidity needs for a 30 calendar day time horizon under a significantly severe liquidity stress scenario specified by supervisors

Requirements

$$\frac{\textit{Liquid assets}}{\textit{Net cash outflows}} \geq 100\%$$

- Why?
  - At a minimum, the stock of liquid assets should enable the bank to survive until Day 30 of the stress scenario, by which time it is assumed that appropriate corrective actions can be taken by management and/or supervisors, and/or the bank can be resolved in an orderly way
  - The specified scenario is built upon circumstances experienced in the global financial crisis that began in 2007 and entails both institution-specific and systemic shocks

What is NEW? Liquidity Coverage (LC)

- Who?
  - All financial institutions on individual and consolidated basis
  - According to CRD, institutions are required to report items separately if they are indexed to a currency where the institution has a significant liquidity risk or such currency is the lawful currency of a juridiction where they have a significant branch. This is limited to those currencies which comprise more than 5% of an institutions liabilities
- When?
  - Observation period from 2012 to 2014
  - Pillar 1 requirement starting in 2015

What is NEW? Stable Funding Ratio (SFR)

- What?
  - A minimum acceptable amount of stable funding based on the liquidity characteristics of an institution's assets and activities over a one year horizon
- Requirement: $\frac{\textit{Available amount of stable funding}}{\textit{Available amount of required funding}} \geq \mathbf{100\%}$
- Why?
  - The SFR aims to limit over-reliance on short-term wholesale funding during times of buoyant market liquidity and encourages better assessment of liquidity risk across all on- and off-balance sheet items
  - The SFR approach offsets incentives for institutions to fund their stock of liquid assets with short-term funds that mature just outside the 30-day horizon for that standard
- Who?
  - All financial institutions on individual and consolidated basis

What is NEW? Leverage Ratio

Leverage Ratio to supplement risk based capital requirements

- What?

  The leverage ratio shall be calculated as an institution's capital measure divided by that institution's total exposure measure and shall be expressed as a percentage.

  General definition:
  The maximum of exposure an institution can have with their counterparties according to her available own funds.

  Formula:
  $$\textit{Leverage ratio} = \frac{\textit{Capital measure}}{\textit{Total exposure measure}}$$

- Why?
  - Globally comparable measure
  - Puts floor under build-up of leverage in banking sector
  - Safeguard against model risk and measurement error

- Who?
  - All financial institutions on individual and consolidated basis
  - Under conditions, simplified disclosures possible for derivatives

What is NEW? Leverage Ratio

- When?
  - Observation period from 2013 to 2017
  - Public publishing starting in 2015
  - Pillar 1 requirement starting in 2018
- Foreseen ratio?
  - 3% ratio considered during the calibration period

    ➔ If an institution hold 1 € of own funds, the "maximum exposure" allowed is 33,33 €
  - The new rules decided in January 2014 will allow banks to reduce their exposure by:
    - offsetting some derivatives against each other
    - excluding some assets from the leverage ratio exposure calculation
  - EBA will publish by the end October 2016 the level of the ratio and the final details to calculate it

What is NEW? Own funds

- Redefining regulatory capital
  - Common Equity must dominate Tier 1 capital
  - Removal of innovative capital, replaced with additional going concern capital
  - Abolition of Tier 3 capital

- Capital must be loss absorbent at the point of non-viability
  - Some instruments were not loss-absorbing during the financial crisis
  - Tier 1 and 2 capital instruments will need to be convertible to common equity on the occurrence of prescribed triggers
  - The supervisor must be able to activate the prescribed triggers

What is NEW? Capital Buffers (1/2)

- Conservation buffers
  - Why?
    - Firms made large distributions of dividends and compensations even when financial outlook was deteriorating
    - Protection against plausible severe shocks
    - Not enough capital reserved for future lending activity
  - How and how much?
    - To be calibrated at 2.5% of RWA
    - Consists of common equity
    - Buffer can be used during times of financial and economic stress
    - But use of buffer will result in restrictions on distribution of earnings
    - No discretion by the national supervisor

What is NEW? Capital Buffers (2/2)

- Countercyclical buffer
  - Why?
    - Existing financial rules have been pro-cyclical
      e.g. Higher profits → more capital → more lending/trading → Higher profits
    - The collapse of the banking sector is made even more dramatic by this mechanism working in reverse
    - Buffer to make firms more resilient to these dynamics
  - How and how much?
    - To be calibrated between 0 - 2.5% of RWA
    - There will be some discretion for the national supervisor
    - An extension of the conservation buffer

What is NEW? SIFIs

- Systemically Important Financial Institutions

  Why?

  - Severity of problems that emanates from the failure of global systemically important financial institutions (G-SIFIs)
  - Cross-border negative externalities created by systemically important banks which current regulatory policies do not fully address
  - G-SIFI's business models generally place greater emphasis on trading and capital markets related activities

  How and how much?

  - To be calibrated between 1 - 2.5% of RWA
  - Calibration depends on the specificities of the institution
  - No discretion for the national supervisor

What is NEW? Transitional Arrangements

Range of capital ratio by components

	2014	2015	2016	2017	2018	2019
Minimum Own funds requirements	8%	8%	8%	8%	8%	8%
Of Which:						
Common Equity Tier 1	*[4%-4,5%]*	*4.5%*	*4.5%*	*4.5%*	*4.5%*	*4.5%*
Tier 1 capital ratio (Common Equity Tier 1 + Additional Tier 1)	*[5,5%-6%]*	*6.0%*	*6.0%*	*6.0%*	*6.0%*	*6.0%*
+						
Conservation buffer (CET1)			0.625%	1.250%	1.875%	2.5%
Countercyclical buffer			[0-0,625%]	[0-1,25%]	[0-1,875%]	[0-2,5%]
=						
Own funds requirements + 2 buffers	**8%**	**8%**	**[8,625%-9,25%]**	**[9,125%-10,5%]**	**[9,875%-11,75%]**	**[10,5%-13%]**
Of Which:						
Common Equity Tier 1	*[4%-4,5%]*	*4.5%*	*5.125%*	*5.75%*	*6.375%*	*7.0%*

NB:

- All year dates start at 1st January
- Competent authorities determine the levels of the CET1 and Tier 1 capital ratios in the ranges
- Conservation buffer must be CET1
- Countercyclical buffer can be any kind of own funds
- Additional loss absorbency for G-SIFIs not included

What is NEW? Pillar 2 Basel 3 new requirements

- Liquidity
- Back testing
- Sound stress test practices & sound compensation practices
- Management Information System (MIS) able to identify, measure, monitor and report firm wide risk
- Capturing the risk of off-balance sheet exposures and securitisation activities
- National supervisors can impose a wide range of measures, including additional capital requirements, on individual or consolidated basis to address higher-than normal risk
- Enhanced governance: Time commitment, more diversity, more power/authority to risk management function

What is NEW? Basel III pillar 3 public disclosure

- No major changes compared to Basel II but …
- … Pilar 3 users/investors asked for:
  - Development of standardized templates (exposure class, granularity, scope of data, geographical breakdown, etc)
  - More than one publication per year
  - Publication shortly after the end of the period
  - Reconciliation between:
    - Accounting and regulatory capital
    - Balance sheet asset and EAD

Basel III impact estimation on a nutshell

The overall change in common equity Tier 1 (CET1), Tier 1 and total capital if Basel III would have been fully implemented, as of **31 December 2012** (European Banks)

Average capital ratios by banking group (%)

	Number of banks	CET1		Tier 1		Total capital	
		Current	Basel III	Current	Basel III	Current	Basel III
Group 1	40	11,5	8,4	13,0	8,5	15,2	9,6
Group 2	122	11,3	7,9	12,0	8,5	14,6	10,1

Group 1 banks are those with Tier 1 capital in excess of €3 billions and internationally active (aggregate coverage in terms of Basel II risk-weighted assets: 93%).

All other banks are categorised as Group 2 (aggregate coverage: 31%).
Source : EBA - Basel III monitoring exercise 25 September 2013

Estimated overall capital shortfall (€ billion)

	Group 1	Group 2
Group 1	40	122
Minimum		
CET1 shortfall - 4.5%	2,2	11,4
Tier 1 shortfall - 6.0%	5,7	14,1
Total capital shortfall - 8.0%	33,0	22,0
Minimum plus capital conservation buffer (2019)*		
CET1 shortfall - 7.0%	70,4	25,9
Tier 1 shortfall - 8.5%	162,5	32,6
Total capital shortfall - 10.5%	257,5	45,6

* Including the capital surcharge for global systemically important banks (G-SIBs).

Final

For Group 1 banks, the overall impact on the CET1 ratio can be attributed in almost equal parts to changes in the definition of capital and to changes related to the calculation of risk-weighted assets: while CET1 declines by 20.5%, RWA increase by 18.4%, on average. For Group 2 banks, while the change in the definition of capital results in a decline in CET1 of 26.1%, the new rules on RWA affect Group 2 banks far less (+8.8%).

Basel III impact estimation on a nutshell

The overall change in common equity Tier 1 (CET1), Tier 1 and total capital if Basel III would have been fully implemented, as of **31 December 2011** (European Banks)

Average capital ratios by banking group (%)

	Number of banks	CET1		Tier 1		Total capital	
		Current	Basel III	Current	Basel III	Current	Basel III
Group 1	41	10,3	6,9	12,0	7,1	14,2	8,0
Group 2	111	10,6	7,2	11,4	7,7	14,1	9,6

Group 1 banks are those with Tier 1 capital in excess of €3 billions and internationally active (aggregate coverage in terms of Basel II risk-weighted assets: 92%).

All other banks are categorised as Group 2 (aggregate coverage: 27%).
Source : EBA - Basel III monitoring exercise 27 September 2012

Estimated overall capital shortfall (€ billion)

	Group 1	Group 2
Group 1	41	111
Minimum		
CET1 shortfall - 4.5%	7,7	10,3
Tier 1 shortfall - 6.0%	25,1	13,6
Total capital shortfall - 8.0%	84,7	17,7
Minimum plus capital conservation buffer (2019)*		
CET1 shortfall - 7.0%	198,6	25,6
Tier 1 shortfall - 8.5%	311,8	37,5
Total capital shortfall - 10.5%	433,5	45,4

Final

* Including the capital surcharge for global systemically important banks (G-SIBs).

For Group 1 banks, the overall impact on the CET1 ratio can be attributed in almost equal parts to changes in the definition of capital and to changes related to the calculation of risk-weighted assets: while CET1 declines by 17,6%, RWA increase by 12,8%, on average. For Group 2 banks, while the change in the definition of capital results in a decline in CET1 of 22,5%, RWA increase by 10,2%, on average

Basel III impact estimation in a nutshell

The overall change in common equity Tier 1 (CET1), Tier 1 and total capital if Basel III would have been fully implemented, as of **30 June 2011** (European Banks)

Average capital ratios by banking group (%)

	Number of banks	CET1		Tier 1		Total capital	
		Current	Basel III	Current	Basel III	Current	Basel III
Group 1	45	10,2	6,5	11,9	6,7	14,4	7,8
Group 2	109	9,8	6,8	10,9	7,4	13,6	9,4

Group 1 banks are those with Tier 1 capital in excess of €3 billions and internationally active. All other banks are categorised as Group 2 banks.

There are 19 Group 2 banks that have Tier 1 capital in excess of €3 billions. These banks account for 64.3% of total Group 2 RWA.

Source : EBA - Basel III monitoring exercise

Estimated overall capital shortfall (€ billion)

	Group 1	Group 2
Group 1	45	109
Minimum		
CET1 shortfall - 4.5%	17,6	10,6
Tier 1 shortfall - 6.0%	51,2	17,8
Total capital shortfall - 8.0%	128,0	22,2
Minimum plus capital conservation buffer (2019)*		
CET1 shortfall - 7.0%	242,1	34,5
Tier 1 shortfall - 8.5%	360,6	49,6
Total capital shortfall - 10.5%	485,4	58,9

* Including the capital surcharge for global systemically important banks (G-SIBs).

For Group 1 banks, the overall impact on the CET1 ratio can be attributed in almost equal parts to changes in the definition of capital and to changes related to the calculation of risk-weighted assets: while CET1 declines by 22.7%, RWA increase by 21.2%, on average. For Group 2 banks, while the change in the definition of capital results in a decline in CET1 of 25.9%, the new rules on RWA affect Group 2 banks far less (+6.9%).

2014 Roadmap CRR/575 Regulatory Reporting

		January	February	March	April	May	June
Monthly	LC			●	●	●	●
Quaterly	FINREP conso						●
	COREP solo	●	●	●	●	●	●
	SFR			●			●
	Large Exposure			●			●
	Leverage Ratio	●	●	●	●	●	●
Bi-annualy	COREP conso						●
Annualy	Own Funds						●

● Calculation and reporting to perform ● only calculation to perform

2014 Reporting deadlines

REPORTS	Applicable	Frequency	1st reporting reference date	Deadline for reporting
EBA COREP	01/01/2014	- Quaterly for solo - Semi-annual for conso	- 31/03/2014 for solo - 30/06014 for conso	- 31/03/2014: maximum remittance deadline for 31/03/2014 data submissions reporting is 30/05/2014 for solo - After Q1 2014: maximum submission deadline is +/- 42 calendar days after the end of the reporting period
EBA LARGE EXPOSURE	01/01/2014	Quaterly	31/03/2014	- 31/03/2014: maximum remittance deadline for 31/03/2014 data submissions reporting is 30/05/2014 for solo and 30/06/2014 for conso - After Q1 2014: maximum submission deadline is +/- 42 calendar days after the end of the reporting period
EBA LEVERAGE RATIO*	01/01/2014	Quaterly	31/03/2014	- 31/03/2014: maximum remittance deadline for 31/03/2014 data submissions reporting is 30/05/2014 for solo and 30/06/2014 for conso - After Q1 2014: maximum submission deadline is +/- 42 calendar days after the end of the reporting period
EBA LIQUIDITY COVERAGE	31/03/2014	Monthly	31/03/2014	- 30th calendar day after the end of the reporting period in 2014 - After 2014 : 15th calendar day after the reporting reference date
EBA LIQUIDITY STABLE FUNDING	31/03/2014	Quaterly	31/03/2014	- 31/03/2014: maximum remittance deadline for 31/03/2014 data submissions reporting is 30/05/2014 for solo and 30/06/2014 for conso - After Q1 2014: maximum submission deadline is +/- 42 calendar days after the end of the reporting period
EBA FINREP	01/07/2014	Quaterly with some reports to be sent on semi annual and annual frequencies	31/09/2014	maximum submission deadline is +/- 42 calendar days after the end of the reporting period

*Leverage ratio: Unless specified by the national regulator, the ratio is calculated as the simple arithmetic mean of the monthly leverage ratio

Automation of Regulatory Reporting: COREP

Report Name	Full automation up to 5.6.0	Partial automation up to 5.6.0	Manual reports up to 5.6.0
REPORTING ON OWN FUNDS AND OWN FUNDS REQUIREMENTS			
C 01.00 - OWN FUNDS (CA1).	✓		
C 02.00 - OWN FUNDS REQUIREMENTS (CA2)	✓		
C 03.00 - CAPITAL RATIOS AND CAPITAL LEVELS (CA3)	✓		
C 04.00 - MEMORANDUM ITEMS (CA4)	✓		
C 05.01 - TRANSITIONAL PROVISIONS (CA5.1)	✓		
C 05.02 - GRANDFATHERED INSTRUMENTS: INSTRUMENTS NOT CONSTITUING STATE AID (CA5.2)			✓
C 06.00 - GROUP SOLVENCY (GS)		✓	
C 07.00 - CREDIT AND COUNTERPARTY CREDIT RISKS AND FREE DELIVERIES: STANDARDISED APPROACH TO CAPITAL REQUIREMENTS (CR SA)	✓		
C 08.01 - CREDIT AND COUNTERPARTY CREDIT RISKS AND FREE DELIVERIES: IRB APPROACH TO CAPITAL REQUIREMENTS (CR IRB 1)	✓		
C 08.02 - CREDIT AND COUNTERPARTY CREDIT RISKS AND FREE DELIVERIES: IRB APPROACH TO CAPITAL REQUIREMENTS: BREAKDOWN BY OBLIGOR GRADES OR POOLS (CR IRB 2)	✓		
C 09.01 - GEOGRAPHICAL BREAKDOWN OF EXPOSURES BY RESIDENCE OF THE OBLIGOR: SA EXPOSURES (CR GB 1)	✓		
C 09.02 - GEOGRAPHICAL BREAKDOWN OF EXPOSURES BY RESIDENCE OF THE OBLIGOR: IRB EXPOSURES (CR GB 2)	✓		
C 09.03 - BREAKDOWN OF TOTAL OWN FUNDS REQUIREMENTS FOR CREDIT RISK OF RELEVANT CREDIT EXPOSURES BY COUNTRY (CR GB 3)	✓		
C 10.01 - CREDIT RISK: EQUITY - IRB APPROACHES TO CAPITAL REQUIREMENTS (CR EQU IRB 1)	✓		
C 10.02 - C 10.02 - CREDIT RISK: EQUITY - IRB APPROACHES TO CAPITAL REQUIREMENTS. BREAKDOWN OF TOTAL EXPOSURES UNDER THE PD/LGD APRROACH BY OBLIGOR GRADES (CR EQU IRB 2)	✓		
C 11.00 - SETTLEMENT/DELIVERY RISK (CR SETT)	✓		

Automation of Regulatory Reporting: COREP

Report Name	Full automation up to 5.6.0	Partial automation up to 5.6.0	Manual reports up to 5.6.0
REPORTING ON OWN FUNDS AND OWN FUNDS REQUIREMENTS			
C 12.00 - CREDIT RISK: SECURITISATIONS - STANDARDISED APPROACH TO OWN FUNDS REQUIREMENTS (CR SEC SA)	✓		
C 13.00 - CREDIT RISK: SECURITISATIONS - IRB APPROACH TO OWN FUNDS REQUIREMENTS (CR SEC IRB)	✓		
C 14.00 - DETAILED INFORMATION ON SECURITISATIONS (SEC Details)	✓		
C 16.00 - OPERATIONAL RISK (OPR)	✓		
C 17.00 - OPERATIONAL RISK: GROSS LOSSES BY BUSINESS LINES AND EVENT TYPES IN THE LAST YEAR (OPR Details)	✓		
C 18.00 - MARKET RISK: STANDARDISED APPROACH FOR POSITION RISKS IN TRADED DEBT INSTRUMENTS (MKR SA TDI)	✓		
C 19.00 - MARKET RISK: STANDARDISED APPROACH FOR SPECIFIC RISK IN SECURITISATIONS (MKR SA SEC)	✓		
C 20.00 - MARKET RISK: STANDARDISED APPROACH FOR SPECIFIC RISK IN THE CORRELATION TRADING PORTFOLIO (MKR SA CTP)	✓		
C 21.00 - MARKET RISK: STANDARDISED APPROACH FOR POSITION RISK IN EQUITIES (MKR SA EQU)	✓		
C 22.00 - MARKET RISK: STANDARDISED APPROACHES FOR FOREIGN EXCHANGE RISK (MKR SA FX)	✓		
C 23.00 - MARKET RISK: STANDARDISED APPROACHES FOR COMMODITIES (MKR SA COM)	✓		
C 24.00 - MARKET RISK INTERNAL MODELS (MKR IM)	✓		
C 25.00 - CREDIT VALUE ADJUSTMENT RISK (CVA)	✓		
REPORTING ON LOSSES STEMMING FROM LENDING COLLATERALISED BY IMMOVABLE PROPERTY			
C 15.00 - EXPOSURES AND LOSSES FROM LENDING COLLATERALISED BY IMMOVABLE PROPERTY (CR IP LOSSES)	✓		

Automation of Regulatory Reporting: Large exposure and Leverage ratio

Report Name	Full automation up to 5.6.0	Partial automation up to 5.6.0	Manual reports up to 5.6.0
REPORTING ON LARGE EXPOSURES			
C 26.00 - Large Exposures limits (LE Limits)	✓		
C 27.00 - Identification of the counterparty (LE 1)	✓		
C 28.00 - Exposures in the non-trading and trading book (LE 2)	✓		
C 29.00 - Detail of the exposures to individual clients within groups of connected clients (LE 3)	✓		
C 30.00 - Maturity buckets of the exposures in the non-trading and trading book (LE 4)	✓		
C 31.00 - Maturity buckets of the exposures to individual clients within groups of connected clients (LE 5)	✓		
REPORTING ON LEVERAGE			
C 40.00 - ALTERNATIVE TREATMENT OF THE EXPOSURE MEASURE (LR1)		✓	
C 41.00 - ON- AND OFF-BALANCE SHEET ITEMS - ADDITIONAL BREAKDOWN OF EXPOSURES (LR2)		✓	
C 42.00 - ALTERNATIVE DEFINITION OF CAPITAL (LR3)		✓	
C 43.00 - BREAKDOWN OF LEVERAGE RATIO EXPOSURE MEASURE COMPONENTS (LR4)		✓	
C 44.00 - GENERAL INFORMATION (LR5)		✓	
C 45.00 - LEVERAGE RATIO CALCULATION (LRCalc)		✓	
C 46.00 - ENTITIES THAT ARE CONSOLIDATED FOR ACCOUNTING PURPOSES BUT ARE NOT WITHIN THE SCOPE OF PRUDENTIAL CONSOLIDATION (LR6)		✓	

Automation of Regulatory Reporting: LC and SF

Report Name	Full automation up to 5.6.0	Partial automation up to 5.6.0	Manual reports up to 5.6.0
REPORTING ON LIQUIDITY			
C 51.00 - LIQUIDITY COVERAGE - LIQUID ASSETS	✓		
C 52.00 - LIQUIDITY COVERAGE - OUTFLOWS	✓		
C 53.00 - LIQUIDITY COVERAGE - INFLOWS	✓		
C 54.00 - LIQUIDITY COVERAGE - COLLATERAL SWAPS	✓		
C 60.00 - STABLE FUNDING - ITEMS REQUIRING STABLE FUNDING	✓		
C 61.00 - STABLE FUNDING - ITEMS PROVIDING STABLE FUNDING	✓		

Automation of Regulatory Reporting: FINREP

Report Name	Full automation in 5.6.0	Partial automation in 5.6.0	Manual reports in 5.6.0
F01_01- Balance Sheet Assets	✓		
F01_02 – Balance Sheet Liabilities	✓		
F01_03 – Balance Sheet Equity	✓		
F02 - Statement of profit or loss	✓		
F03 - Statement of comprehensive income	✓		
F04 - Breakdown of financial assets by instrument and counterparty sector	✓		
F05 - Breakdown of loans and advances by product	✓		
F06 - Breakdown of loans and advances to non-financial corporations by NACE codes	✓		
F07 - Financial assets subject to impairment that are past due or impaired	✓		
F08 - Breakdown of financial liabilities	✓		
F09 - Loan commitments, financial guarantees and other commitments	✓		
F10 - Derivatives – Trading	✓		
F11 - Derivatives - Hedge accounting	✓		
F12 - Movements in allowances for credit losses and impairment of equity instruments	✓		
F13 - Collateral and guarantees received	✓		

Automation of Regulatory Reporting: FINREP

Report Name	Full automation in 5.6.0	Partial automation in 5.6.0	Manual reports in 5.6.0
F14 - Fair value hierarchy: financial instruments at fair value	✓		
F15 - Derecognition and financial liabilities associated with transferred financial assets			✓
F16 - Breakdown of selected statement of profit or loss items	✓		
F17 - Reconciliation between accounting and CRR scope of consolidation: Balance Sheet			✓
F20 - Geographical breakdown	✓		
F21 - Tangible and intangible assets: assets subject to operating lease	✓		
F22 - Asset management, custody and other service functions	✓		
F30 - Off-balance sheet activities: interests in unconsolidated structured entities	✓		
F31 - Related parties	✓		
F40 - Group structure			✓
F41 - Fair value	✓		
F42 - Tangible and intangible assets: carrying amount by measurement method	✓		
F43 – Provisions	✓		
F44 - Defined benefit plans and employee benefits			✓
F45 - Breakdown of selected items of statement of profit or loss	✓		
F46 - Statement of changes in equity	✓		

Upcoming publications/changes

- EBA: 67 Technical Standards will be completed in 2014
  - Example for additional liquidity monitoring metrics: 8.400 cells to report
    - CP published on 23/05/2013
    - Deadline for comments 14/08/2013
    - Draft ITS published on 18/12/2013
    - Submission of the ITS to the European Commission (EC) by 01/01/2014
    - Application date 01/07/2015

Template	Subject	Number of cells
Final draft ITS on additional monitoring metrics Annex I	Contractual Flows	3102
Final draft ITS on additional monitoring metrics Annex III	COF Product	55
Final draft ITS on additional monitoring metrics Annex III	Prices for various funding	126
Final draft ITS on additional monitoring metrics Annex III	Roll-overs	5084
Final draft ITS on additional monitoring metrics Annex V	CCC Counterparty	9
	Total	**8376**

Upcoming publications/changes

- EBA Single Rulebook Q&A on 20/02/2014
  - 689 questions submitted
  - 158 questions rejected
  - 178 questions answered
  - **353 questions under review**

Source: EBA website

Upcoming publications/changes

- The European Central Bank (ECB) is preparing to take on new banking supervision tasks as part of a single supervisory mechanism
- It is expected that the ECB will assume its new banking supervision responsibilities in autumn 2014, 12 months after the regulation creating the supervisor enters into force
- Under the new system of supervision, the ECB will directly supervise significant credit institutions. It will work closely with the national competent authorities to supervise all other credit institutions under the overall oversight of the ECB. The ECB may decide at any time to take responsibility for a less-significant credit institution

Source: ECB website

Common pains being felt by firms

- General statements
  - Regulatory environment is continuously changing: the EU and especially the EBA have and are still publishing dozen of guidelines and additional reporting requirements/instructions in 2013 and 2014 with tight deadlines to implement them. There is not enough time to analyze and integrate them
  - Even after 2014, several calculations and reports will be reviewed and recalibrated (for example leverage ratio, LCR, NSFR) and will represent an additional workload but also uncertainty

- The number of templates to report and the number of figures required have dramatically increased under B3-new FINREP:
  - COREP: about 17.500 Defined templates cells
  - FINREP: about 4.500 Defined templates cells

Common pains being felt by firms

- The consequence are:
  - Increased amount of data must be gathered (real estate collateral, NACE code, own funds instruments, Central Counterparties, …)
  - Increased workload to produce them
  - Increased workload to analyze/validate them
  - Increased amount of data to process and store on IT perspective (time of processing matter, archiving)
- Cost of ownership
  - Has increased and will increase in the coming years in order to stay compliant
  - Collateral cost increases on back office systems, change management...

Common pains being felt by firms

- But more importantly:

  Banks that do not have automated calculation chains will not be able to meet the required quality and deadlines

- Liquidity regulatory reporting is new under B3 (under B2, it was only part of pillar 2). The consequences:
  - New processes must be built and new data must be gathered
  - Some of the liquidity figures are calculated with models and this implies deep knowledge on this topic
  - In many banks, the reporting of EBA liquidity is done by the reporting officer (Finance department). They know well B2-B3, FINREP and statistical reporting but they don't yet have the knowledge to understand, challenge and validate the liquidity figures

Common pains being felt by firms

- Apart from the calculation dilemma, the B3 requirements are more conservatives than B2. Many banks will have to increase their own funds (potentially giving less bonuses / dividends, reducing costs) or reduce their risk (by stopping, selling some activities, etc.).

And beyond regulatory reporting aspects

- Basel III regulation insists that the bank demonstrates to the regulator that they have a good solvency ratio before making any dividend distribution
- If a bank cannot demonstrate this, it is strictly forbidden to distribute the dividend
- And will become a big concern for the top management.

Last but not least...

- Banks have to “fight” with additional regulatory changes that are very demanding in terms of resources, analysis and deadlines:
  - EMIR
  - FATCA
  - Etc.

- European Central Bank will supervise banks in EURO zone starting in 2014, and there is big uncertainty on the ECB reporting requirements …

Tips to ease the process

- Plan and allocate sufficient time and skills to address COREP.
- Make sure that senior management understand the scope and impact of the change. Regulators are requesting status updates.
- Get a good understanding of all of the applicable templates and the results that you are expecting by using 31/12/13 data.
- Identify any gaps in data or process and have a plan in place to address.
- Where possible maintain product and P/L Class reporting codes directly in the GL. This facilitates maintenance and makes gaps easier to identify.
- If uploading in XBRL for the first time, plan early testing of submission process.
- Check questions raised (689 to date) and answers given on EBA website.

http://www.eba.europa.eu/single-rule-book-qa?#search

Questions

Wolters Kluwer Financial Services and its regulatory reporting solutions

by Marc Tesolin

Wolters Kluwer
Financial Services

When you have to be right

Wolters Kluwer is a Leading Global Information Company

- 2012 Revenue: $4.7 Billion (€3.4)
  - Employees: 19,000 worldwide
  - Web site — www.WoltersKluwer.com
- Wolters Kluwer Financial Services is the business unit focused on financial services professionals within the Financial & Compliance Services division

Wolters Kluwer
Health & Pharma Solutions

Wolters Kluwer
Tax & Accounting

Wolters Kluwer
Legal & Regulatory

Wolters Kluwer
Financial & Compliance Services

Wolters Kluwer
Financial Services

Global Provider of Finance, Risk and Compliance Solutions

Mission: Empower risk, compliance, finance, and audit professionals to make intelligent and clear-sighted decisions in a rapidly evolving global environment.

- Headquartered in Minneapolis, MN
- Offices in 23 countries
- 2,300 employees

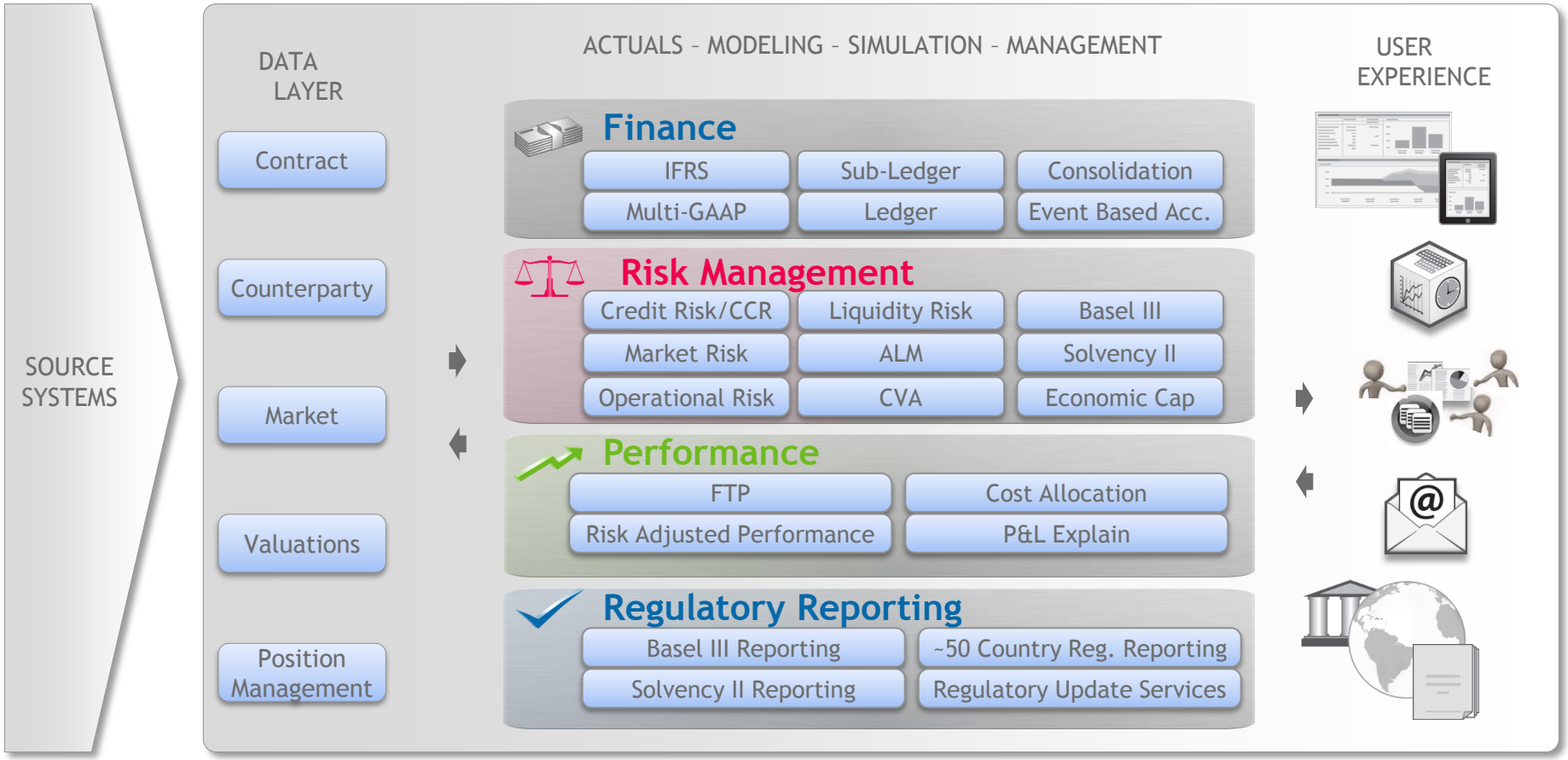
Customers in 100+ countries

15,000 customers globally

Finance, risk management and reporting capabilities utilized by 41 of the world's top 50 banks

Provides solutions to more than 90% of U.S. banks and 85% of U.S. insurers

Summix Functional Architecture



- ✓ Data Validation
- ✓ Data Enrichment
- ✓ Audit Trail
- ✓ Reconciliation
- ✓ Security/Access Control
- ✓ Version Control
- ✓ History Management
- ✓ Documentation
- ✓ Business Rules
- ✓ Workflow
- ✓ Web based
- ✓ Open & Exportable

Country coverage

Unique to our solution is the **Regulatory Update Service** (RUS).

This service makes sure that the regulatory reporting solution is kept up to date with the latest requirements on a continual basis in nearly 50 jurisdictions globally.

Europe
Austria
Belgium
Czech Republic
Denmark
Estonia
France
Germany
Greece
Hungary
Ireland
Italy
Latvia *
Liechtenstein
Lithuania
Luxemburg
Monaco
Netherlands
Poland
Portugal
Slovak Republic
Spain
Switzerland
UK

Middle East
Bahrain
Dubai
Israel
Oman
Qatar
Syria

Africa
South Africa

North America
Canada
US

Caribbean
Bahamas
Barbados*
Belize*
BVI
Cayman Islands*
Dominican Republic*
Eastern Caribbean*
Guyana*
Haiti*
Jamaica
Puerto Rico*
St. Maarten*
Trinidad*
Turks and Caicos*
USVI*

South America
Brazil

Asia
China
Hong Kong
India
Indonesia
Japan
Malaysia
Philippines
Singapore
Taiwan
Thailand

Australasia
Australia

*Countries covered from 2014/2015

Select customers

citibank
Bank of America
Itaú
中国建设银行 China Construction Bank
中国农业银行 AGRICULTURAL BANK OF CHINA
ABLV
STATE STREET.
BNY MELLON
Internal Revenue Service
ANZ
ICICI Bank
FDIC
TD Bank Financial Group
INTERNATIONAL MONETARY FUND
Jefferies Bache
CommonwealthBank
FirstBank
MUFG Bank of Tokyo-Mitsubishi UFJ
BARCLAYS
DNB
HSBC
ธนาคารกรุงไทย KRUNGTHAI BANK
eastwest
BANK SIMPANAN NASIONAL
RBS The Royal Bank of Scotland
EFG
BANCO DO BRASIL
ABN·AMRO
بنك أبوظبي الوطني NATIONAL BANK OF ABU DHABI
SBERBANK
Deutsche Bank
SOCIETE GENERALE
CRÉDIT AGRICOLE
euroclear
GIB GULF INTERNATIONAL BANK
QNB الوطني
COMMERZBANK
CREDIT SUISSE
UBS
UniCredit
bank hapoalim

Wolters Kluwer Financial Services

When you have to be right

Industry Recognition 2013/2014

RiskTech 100® 2014 Top 10

- Global Top 4
- Winner Regulatory Reporting

Chartis RiskTech100™ Category Winner Regulatory Reporting

Chartis RiskTech Quadrant® IFRS Category Leader

Chartis RiskTech Quadrant® Category Leader Data Management and BI for Risk 2013

The Compliance Register Platinum Awards® 2013 Winner www.ComplianceR.com

Chartis RiskTech Quadrant® Best-of-Breed Credit Risk Management Systems for the Banking Book 2013

EUROPEAN CEO RISK & COMPLIANCE AWARDS 2013

Winner Wolters Kluwer Financial Services Best Regulatory Data Management Platform data management summit Awards 2013

CIR Risk Management AWARDS 2013 winner

XCELENT Customer Base 2013 BASEL III AND LIQUIDITY RISK MANAGEMENT SOLUTIONS: BALANCING COMPLIANCE AND PROFITABILITY

WINNER banking technology Awards 2012 READERS' CHOICE AWARDS BEST GOVERNANCE RISK & COMPLIANCE PRODUCT OR SERVICE Wolters Kluwer Financial Services

Chartis RiskTech Quadrant® Category Leader Basel 3 Technology Solutions 2013

Wolters Kluwer Financial Services

When you have to be right

Summix for Regulatory Reporting

Wolters Kluwer
Financial Services

When you have to be right

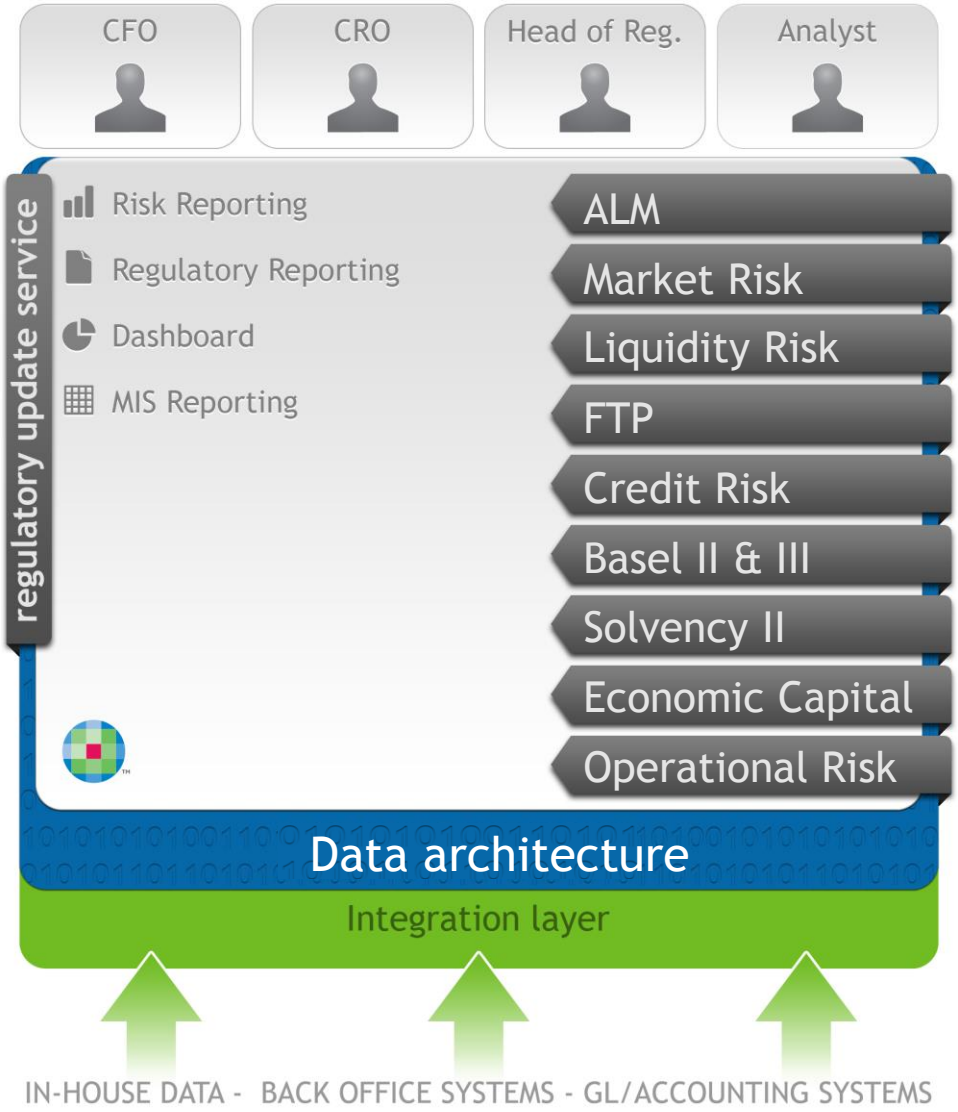
Solutions offering

- Business solutions for regulatory compliance, finance and risk management based on consolidated financial data repository to achieve
- Improving decision making, time to delivery, ease of entering new markets
- Cost reduction on implementation
- Prevention of legal action, reporting failure, liability, reputational risk

Solutions offering

The regulatory update service (RUS)

- Building out and maintaining the financial data library providing up-to-date financial data models
- Building and maintaining the needed information for Reg & Risk solutions resulting from changing regulatory requirements and adapting solutions accordingly

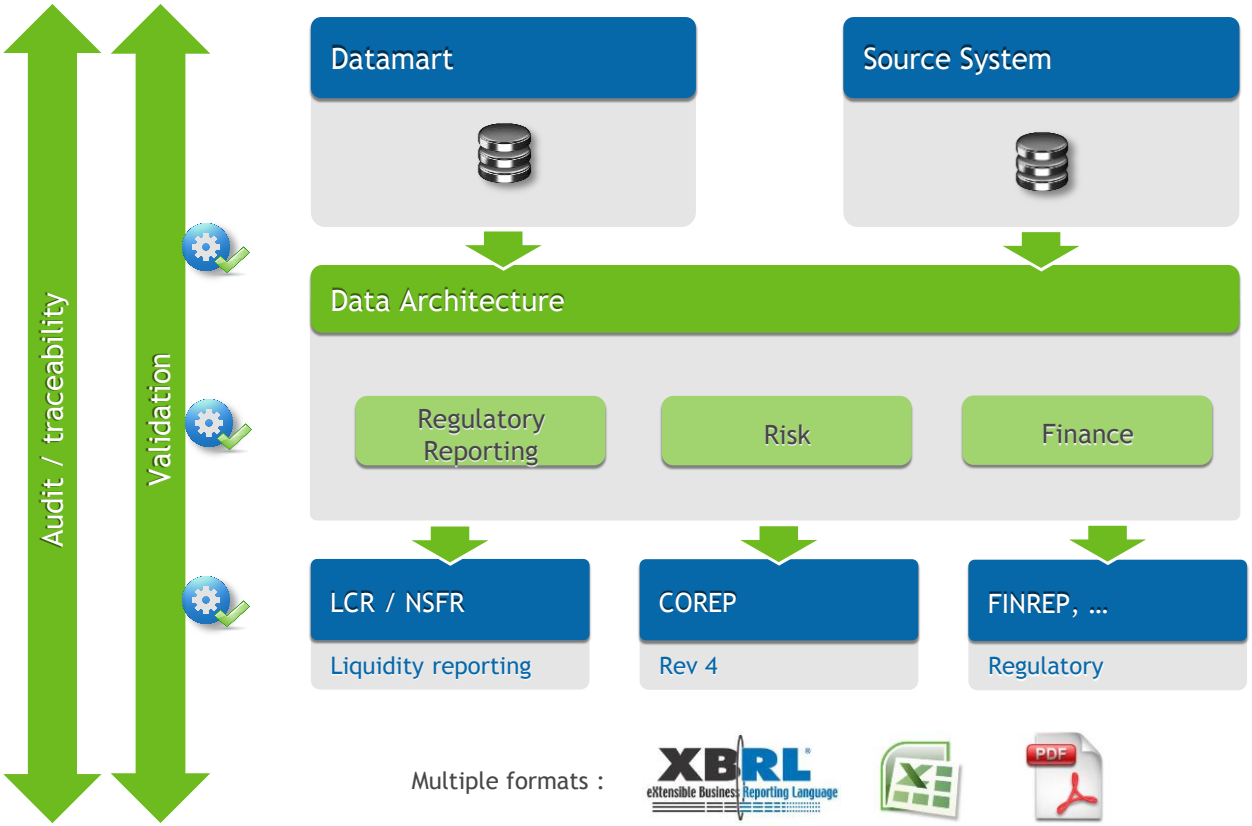


Data Architecture: data model

Wolters Kluwer
Financial Services

When you have to be right

Data Architecture Integration



Data quality

- Validation
- Integrity checks
- Reconciliation / consolidation

Conversion

- Data Transformations
- Calculations
- Classifications

Regulatory data & reporting

- Regulatory validations
- Regulatory cross-checks
- Regulatory Reporting Rules

Delivery to Regulator

- Regulatory Reporting electronic delivery format

What is Data Architecture?

- Data Architecture is a global risk, finance and regulatory data model which encapsulates more than 20 years of global experience that is unique in the marketplace
- It is a central repository that integrates consistent financial data throughout the business with the purpose of producing finance, risk and regulatory compliance reports
- Data Architecture is the centrepiece of each solution of Wolters Kluwer Financial Services: enabling a “single version of the truth”
- The data in Data Architecture may be related to risk data, finance data, regulatory data and/ or profitability data

Relational Data model

What is to be interfaced?

- Counterparts:
  - Clients, issuers, guarantors
- Product Tables:
  - Positions forming the Balance, Off-balance, P&L of the bank at the lowest level of details
- Movements:
  - EBA reporting, IFRS
- Classifications:
  - Products, Economical Sector Codes, ISO Currency codes, …
- Credit limits:
  - Link risks / guarantees & collaterals
- External data:
  - Quotations, rating, ..

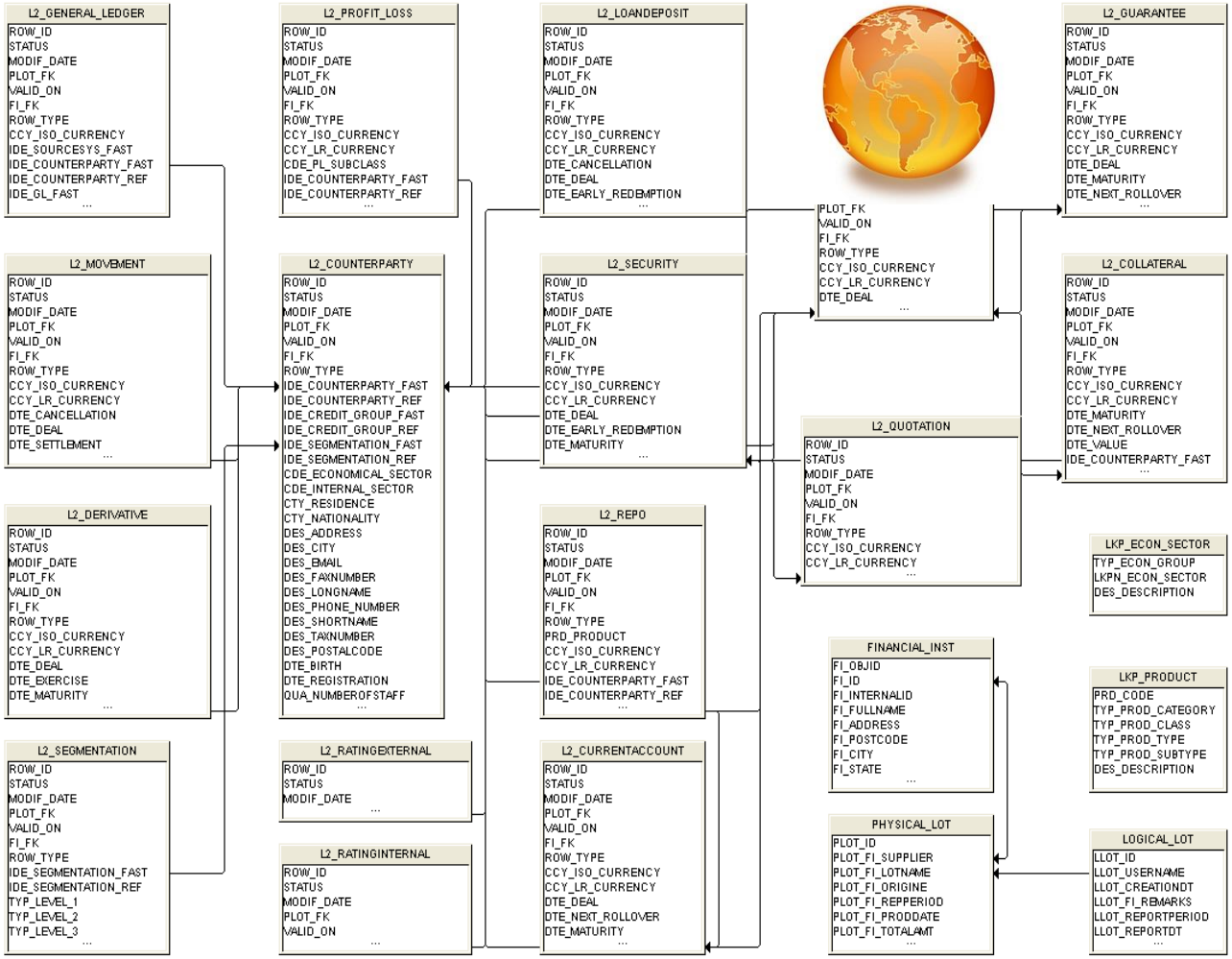


Table structure: Core/Local tables, Mapping tables, decision tables

Core, global tables of Data Architecture used by every customer in every country, common elements of regulatory requirements

Core/Local tables

- Customer Account
  - Customer Account Amount
    - Customer Account LU
      - Customer Account "specific"
- Derivative
  - Derivative Amount
    - Derivative LU
      - Derivative "specific"
- Loan/Deposit
  - Loan/Deposit Amount
    - Loan/Deposit LU
      - Loan/Deposit "specific"

Mapping tables

Market regulation = LKP_MARKET_REG

	Market regulation	Description
	LKPN_MARKET_REG	DES_DESCRIPTION
	(smallint - not null)	(varchar-128 - null)
1	0	NA - (Not applicable)
2	1	Recognised regulated market
3	2	Not recognised regulated market
4	3	Recognised clearinghouse
5	4	Not recognised clearing house

Interest Rate Type = LKP_INT_RATE_TYPE

	Interest rate type	Description
	LKPN_INT_RATE_TYPE	DES_DESCRIPTION
	(smallint - not null)	(varchar-128 - null)
1	0	NA - (Not applicable)
2	1	Fixed
3	2	Floating
4	3	Managed

Decision tables by reporting module

Mapping record type x (C013) = BE_MAPRTX_PL_C013

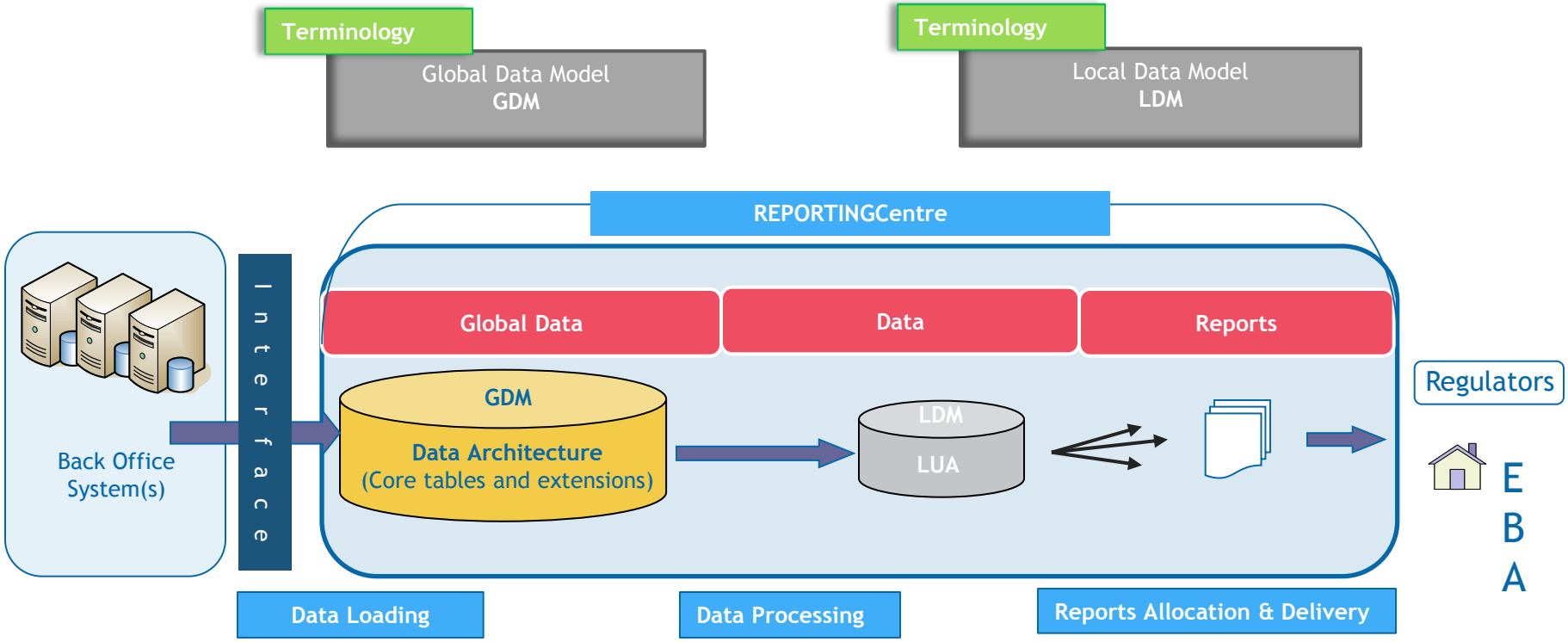
Default value = 0

	Row identifier	Product class code	Profit / loss indicator	Product code of the underlying position	Portfolio indicator	Calculation Maturity	C013	Description
	KEY_DECRT06_C013_PL	TYP_PL_CLASS	TYP_PL_INDICATOR	PRD_PRODUCT	TYP_PORTFOLIO	TYP_DURATION	OUT_C013	DES_C013
	(smallint - not null)	(varchar(32) - null)	(smallint - null)	(varchar(200) - null)	(varchar(16) - null)	(varchar(16) - null)	(integer - null)	(varchar(256) - null)
1		180105	1				41110000	Interest received on Interbank receivables
2		180107	1				41123000	Interest received on leasing and similar cl
3		[180100 .. 180199]	1	[400200 .. 401000],[401002 .. 410100],[410102 .. 410400],[410405 .. 410701],[410701 .. 411000],[411000 .. 419999]			41124000	Interest received on instalment loans (no
4		180106	1	[410100 .. 410102]			41125000	Interest received on mortgage loans
5		180106	1	]410102 .. 410400],[410405 .. 410701],[410701 .. 411000],[411000 .. 419999]			41126000	Interest received on term loans
6		180106	1	140300, 140600, 140700, [141200 .. 141289], [141300 .. 141400], [141600 .. 141603], 200400, 400100, 400200			41127000	Interest received on other credits

Static system tables

- Feed types
- Financial institution

Components



Data Loading

Data, extracted from the Back Office system(s), is loaded into Data Architecture (GDM)

Data Processing

Once data is loaded in to GDM, it is first validated and then mapped from the GDM to a Local Data Model (LDM)

Reports Allocation & Delivery

The data in the Local Data Model is allocated and validated to reports and the final reports are delivered to the Regulatory Authorities

Customer

Wolters Kluwer Financial Services

Data Architecture – Data design strategy

All data tables are split in two:

- **Static Data**
  - General Information are stored there
  - Just one time occurrence of the data
- **Dynamic Data**
  - Recursive information such as amounts associate to this position

Example of a standard loan

The financial institution grants a fixed interest loan to a private individual (private household) with the following characteristics:

Book value (original currency)	**500 000 USD**
Book value (reporting currency)	**490000 EUR**
Accrued interest (original currency)	**5000 USD (after Q1)**
Accrued interest (reporting currency)	**4900 EUR (after Q1)**

Deal date	**13/12/2005**
Value date	**15/12/2005**
Maturity date	**15/12/2010**
Reporting date	**31/03/2006**
Interest rate	**4%**
Position reference	**987654AB**

Counterparty information:

Residence	**LU**
Nationality	**US**
Identifier	**1234CDEF**

How do we store this information in Data Architecture?

Example of a standard loan

Book value (orig ccy) **500 000 USD**

Book value (rep ccy) **490000 EUR**

Accrued interest (orig ccy) **5000)**

Accrued interest (rep ccy) **4900 EUR (after Q1)**

Loan Deposit Amount (record 1) L2_LOD_AMOUNT	
IDE_POSITION_REF	987654AB
DTE_VALUE	15/12/2005
OCA_AMOUNT	500000
RCA_AMOUNT	490000
CCY_ISO_CURRENCY	USD
TYP_AMOUNT	1
TYP_DC_INDICATOR	1

LKP_AMOUNT_TYPE Value 1 - Book value

Loan Deposit L2_LOAN_DEPOSIT	
IDE_POSITION_REF	987654AB
PRD_PRODUCT	410600
DTE_DEAL	13/12/2005
DTE_MATURITY	15/12/2010
PER_INTEREST_RATE (%)	4
TYP_AL_INDIC	1
IDE_COUNTERPARTY_REF	1234CDEF
TYP_INT_RATE_TYPE	1

LKP_PRODUCT Value 410600 - Purchased loans

LKP_AL_INDIC Value 1 - Asset

LKP_IN_RATE_TYPE Value 1 - Fixed

Loan Deposit Amount (record 2) L2_LOD_AMOUNT	
IDE_POSITION_REF	987654AB
DTE_VALUE	15/12/2005
OCA_AMOUNT	5000
RCA_AMOUNT	4900
CCY_ISO_CURRENCY	USD
TYP_AMOUNT	20
TYP_DC_INDICATOR	1

LKP_AMOUNT_TYPE Value 20 - Accrued interest

LKP_DC_INDIC Value 1 - Debit

Counterparty L2_COUNTERPARTY	
IDE_COUNTERPARTY_REF	1234CDE
CDE_ECONOMICAL_SECTOR	9500128
CTY_RESIDENCE	LU
CTY_NATIONALITY	US

LKP_ECON_SECTOR Value 9500128 - Private household

Counterparty information:

Residence **LU**

Nationality **US**

Identifier **1234CDEF**

Deal date **13/12/2005**

Value date **15/12/2005**

Maturity date **15/12/2010**

Reporting date **31/03/2006**

Interest rate **4%**

Position reference **987654AB**

Example of a specific LU loan (Asset Management)

- What do we want ?
  Loan in Asset Management Report

- What do we need ?
  Fill the LU extension of Loan Deposit table

- How ?
  To populate the specific LU product code (102010)

47	102000	Other off-balance sheet iten	Investment managemen	*	*
48	102010	Other off-balance sheet iten	Investment managemen	Asset management	*
49	102020	Other off-balance sheet iten	Investment managemen	Securities underwriting	*
50	102030	Other off-balance sheet iten	Investment managemen	Agency functions	*

Example of a specific LU loan (Asset Management)

Loan Deposit Amount (record 1) L2_LOD_AMOUNT	
IDE_POSITION_REF	987654AB
DTE_VALUE	15/12/2005
OCA_AMOUNT	500000
RCA_AMOUNT	490000
CCY_ISO_CURRENCY	USD
TYP_AMOUNT	1
TYP_DC_INDICATOR	1

Loan Deposit Amount (record 2) L2_LOD_AMOUNT	
IDE_POSITION_REF	987654AB
DTE_VALUE	15/12/2005
OCA_AMOUNT	5000
RCA_AMOUNT	4900
CCY_ISO_CURRENCY	USD
TYP_AMOUNT	20
TYP_DC_INDICATOR	1

Loan Deposit L2_LOAN_DEPOSIT	
IDE_POSITION_REF	987654AB
PRD_PRODUCT	410600
DTE_DEAL	13/12/2005
DTE_MATURITY	15/12/2010
PER_INTEREST_RATE (%)	4
TYP_AL_INDIC	1
IDE_COUNTERPARTY_REF	1234CDEF
TYP_INT_RATE_TYPE	1

Loan Deposit Lu L2_LOAN_DEPOSIT_LU	
IDE_POSITION_REF	987654AB
PRD_PRODUCT	102010

Counterparty L2_COUNTERPARTY	
IDE_COUNTERPARTY_REF	1234CDE
CDE_ECONOMICAL_SECTOR	9500128
CTY_RESIDENCE	LU
CTY_NATIONALITY	US

Example of a specific LU loan (Asset Management)

On report level

Liabilities Side

12	2.3.4	Subordinated liabilities	CP	
12	2.3.99	Other financial liabilities	CP	
13	**2.4**	**Financial liabilities measured at amortised cost**	IFRS 7.8 (f)	**494,900.00**
15	2.4.1	Deposits from credit institutions	CP	494,900.00
16	2.4.2	Deposits (other than from credit institutions)	CP	
17	2.4.3	Debt certificates (including bonds)	CP	

Annexes Side

w501	4.1.1	Custody assets from undertakings for collective investment (UCI)			B16K_5010
w502	4.1.2	Custody assets from clearing or settlement institutions			B16K_5020
w503	4.1.3	Custody assets from other professionals dealing on the financial markets			B16K_5030
w504	4.1.99	Other custody assets			B16K_5040
w505	**4.2**	**Fiduciary transactions**			B16K_5050
w506	**4.3**	**Asset management**	**494,900.00**		
w507	**4.99**	**Other**			B16K_5070

Audit

select sum((RCA_FACEV+RCA_ACCRINT)) from recs_type_1000 where (plot_fk in (81) and Legal entity=1 and status >3) and (((((RCA_BOOKV=0) and (RCA_FAIRVDEAL=0))) and (((Profit-Loss class code=999999) and (PRD_product_LU=102010))))

494,900.00

494,900.00

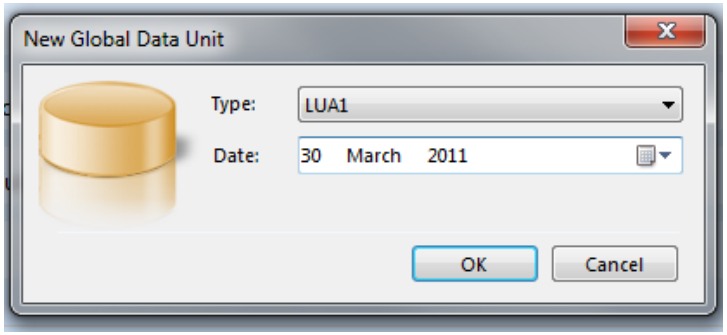
Summix Regulatory Reporting Solution

Wolters Kluwer
Financial Services

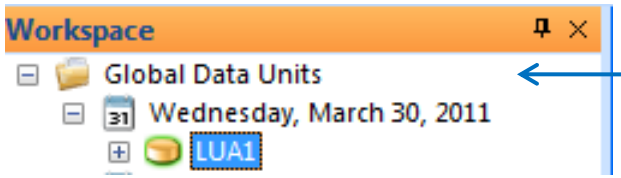
When you have to be right

1. Data loading and validation

- Select the reporting date



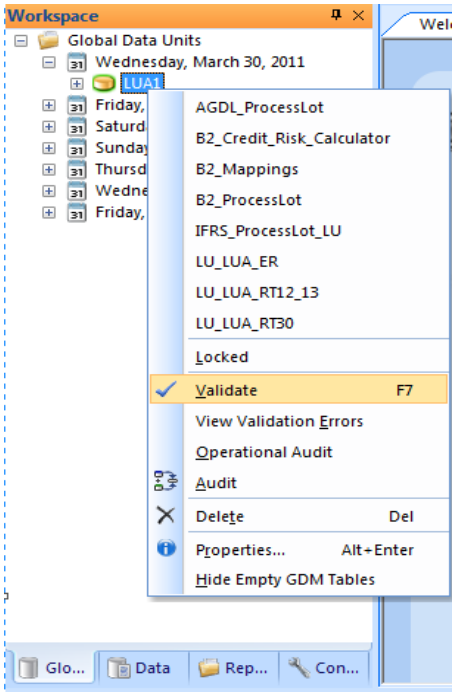
- The feed is created and the data are loaded into Data Architecture

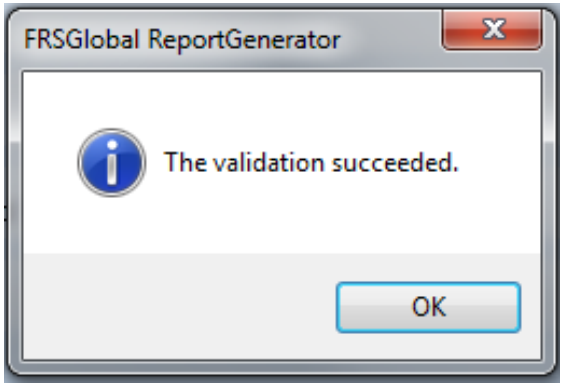


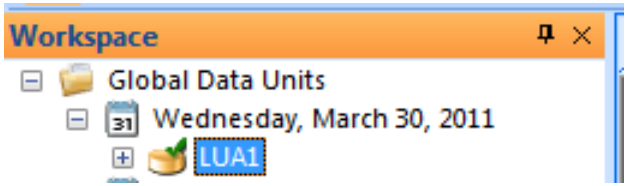
Global Data Level

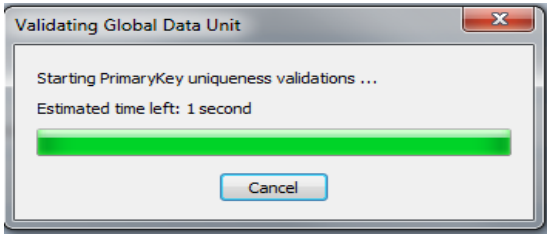
1. Data loading and validation

- Validate: integrity checks







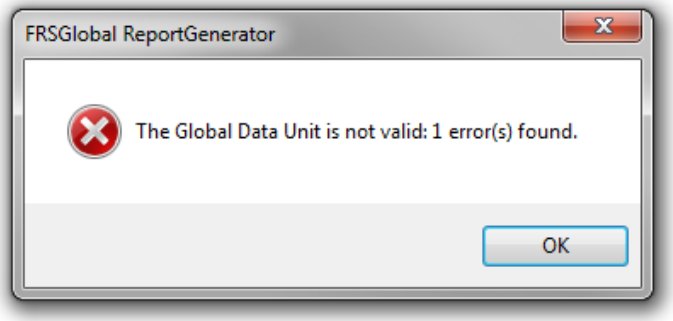


1bis. Validation failed

- Errors are displayed in the output windows

Output

```
14:23:02 I2_rm_der_netting_calc may not have a PK
14:23:02 I2_rm_func_valid_error may not have a PK
14:23:02 I2_rm_issuer_risk may not have a PK
14:23:02 I2_rm_ml_calc may not have a PK
14:23:02 I2_rm_mna_calc may not have a PK
14:23:02 I2_rm_mna_netting may not have a PK
14:23:02 I2_rm_mortgage_loan may not have a PK
14:23:02 I2_rm_retail_floor may not have a PK
14:23:03 I2_tmp_hierarchy_flat may not have a PK
14:23:03 I2_tmp_lot_hierarchy may not have a PK
14:23:03 Getting error count ...
14:23:03  There is 1 error found.
14:23:03  I2_derivative - prd_product: The foreign key value 5204 does not exist in the column lkpn_product of the table lkp_product.
14:23:03  Successfully finished executing the Task work...
```



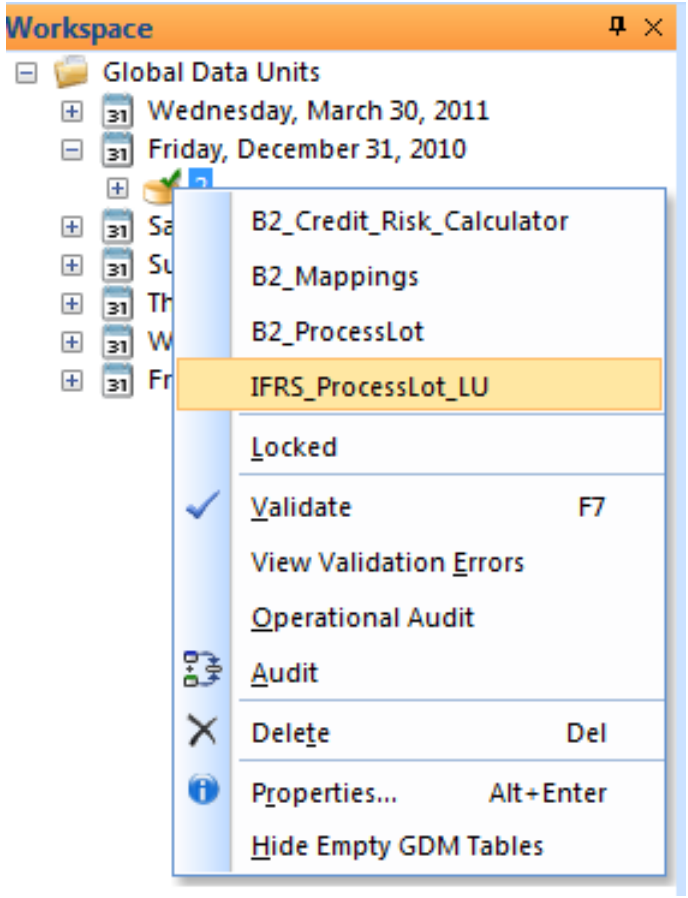
General | SQL | Capture | Validation | Audit

- Modifications can be done directly in the table

	Exch	Limi	Issuer refer	Sour	Business unit refer	Mar	Contra	Prici	Instr	Inte	Deri	Inte	Inte	ISDA	Deri	Pool	Fun	Inte	Inte	Iden	Orig	Rem	Past	Rev	Cove	Cred	Inte	Inte	Product co
			99S01HH30		DWSX99S01HH30S		DWSX			FRS																			520400
			99S01PBN4		DWSX99S01PBN4L		DWSX			FRS																			520311
			99S01PBO2		DWSX99S01PBO2S		DWSX			FRS																			520312
			99S00DWE9		G08499S00DWE9L		G084			FRS																			520313
			99S00DWF6		G08499S00DWF6S		G084			FRS																			520314
			99S00LA21		G08499S00LA21L		G084			FRS																			520315
			99S00LA39		G08499S00LA39S		G084			FRS																			520316
																													520400

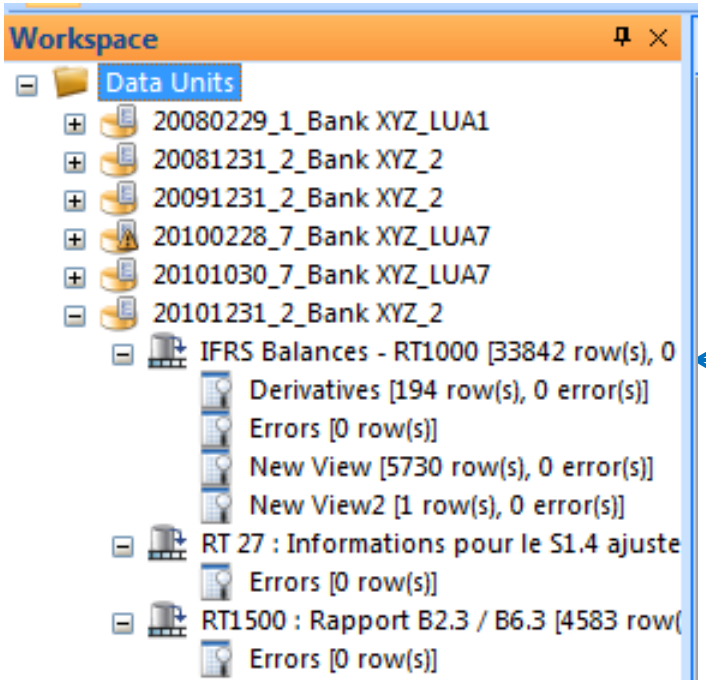
2. Run the reporting process

- Data aggreggation



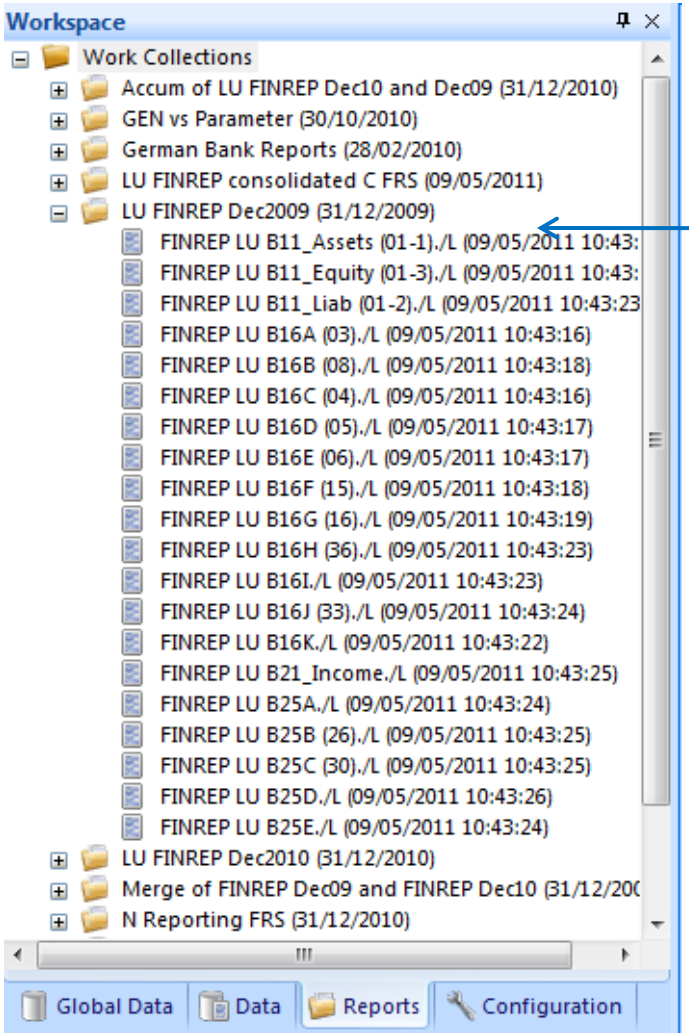
3. Data Level

- At this stage, the raw data present into Data Architecture have been calculated to follow the regulatory structure (line item, economical sector codes, etc.)



(Aggregated) Data Level

4. Reports



Reports are organised in Work Collection (Statistical, FINREP, COREP…)

- Reports can be modified manually;
- Reports can be validated (validation rules issued by the regulators);
- Reports can be delivered to the regulators into the expected delivery format (XBRL, XML …)

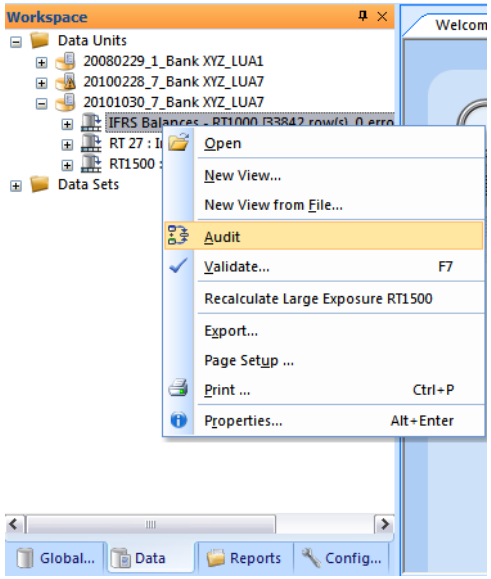
Reporting functionality

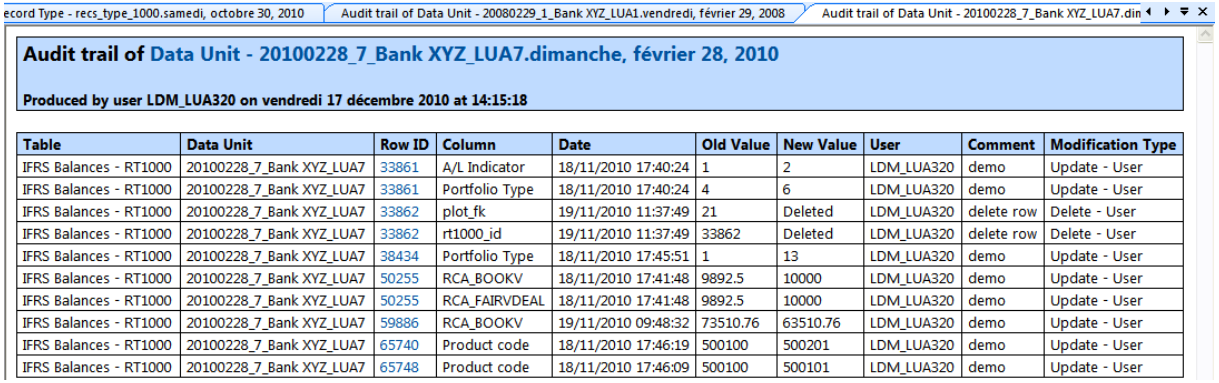
Wolters Kluwer
Financial Services

When you have to be right

Audit Trail

- Modification of data processed:
  - Modification are kept and can be listed on demand





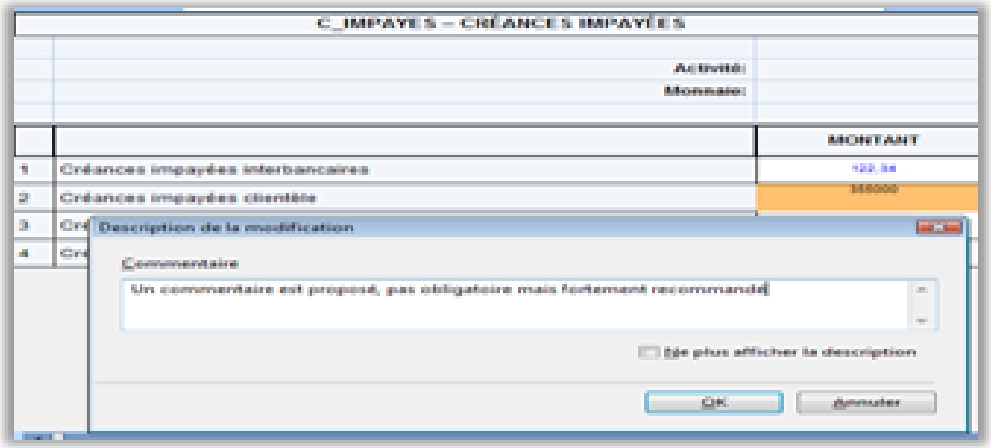
Audit trail of Data Unit - 20100228_7_Bank XYZ_LUA7.dimanche, février 28, 2010

Produced by user LDM_LUA320 on vendredi 17 décembre 2010 at 14:15:18

Table	Data Unit	Row ID	Column	Date	Old Value	New Value	User	Comment	Modification Type
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	33861	A/L Indicator	18/11/2010 17:40:24	1	2	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	33861	Portfolio Type	18/11/2010 17:40:24	4	6	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	33862	plot_fk	19/11/2010 11:37:49	21	Deleted	LDM_LUA320	delete row	Delete - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	33862	rt1000_id	19/11/2010 11:37:49	33862	Deleted	LDM_LUA320	delete row	Delete - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	38434	Portfolio Type	18/11/2010 17:45:51	1	13	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	50255	RCA_BOOKV	18/11/2010 17:41:48	9892.5	10000	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	50255	RCA_FAIRVDEAL	18/11/2010 17:41:48	9892.5	10000	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	59886	RCA_BOOKV	19/11/2010 09:48:32	73510.76	63510.76	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	65740	Product code	18/11/2010 17:46:19	500100	500201	LDM_LUA320	demo	Update - User
IFRS Balances - RT1000	20100228_7_Bank XYZ_LUA7	65748	Product code	18/11/2010 17:46:09	500100	500101	LDM_LUA320	demo	Update - User

Audit Trail

- Modification at report level
  - A comment is requested when modifying a report cell



Wolters Kluwer
Financial Services
When you have to be right

Audit Trail

- Modification at report level
  - Solution enables viewing list of modifications done on reports.

Page d'Accueil | Piste d'audit de Rapport COMCRIMPAY_Impayes.T

Audit du rapport COMCRIMPAY_Impayes.T de la collection de travail SURFI Commun Caisse epargne Alsace

Date de reporting: 30/06/2009

Produit par l'utilisateur LDM le mardi 6 octobre 2009 à 11:09:29

COMCRIMPAY_Impayes,,1,1	**100 000,00**
Modification effectuées par LDM le 06/10/2009 11:09:26: Commentaires à positionner	*99 877,66*
COMCRIMPAY_Impayes,,1,1	**100 000,00**
Modification effectuées par LDM le 06/10/2009 11:04:00:	*0,34*
COMCRIMPAY_Impayes,,1,1	**100 000,00**
Modification effectuées par LDM le 03/10/2009 18:41:21:	*122,00*
COMCRIMPAY_Impayes,,2,1	**355 000,00**
Modification effectuées par LDM le 06/10/2009 11:08:33: Un commentaire est proposé, pas obligatoire mais fortement recommandé	*355 000,00*
COMCRIMPAY_Impayes,,3,1	**222,00**
Modification effectuées par LDM le 03/10/2009 18:41:21:	*222,00*

Audit Trail

- Drill up
  - How record impacts reports

udit trail of Data Unit - 20100228_7_Bank XYZ_LUA7.dimanche, février 28, 2010 | 20100228_7_Bank XYZ_LUA7 IFRS Balances - RT1000 [33841 row(s), 0 error(s)] - Standard View | Drill up report

Drill Up from LDM_LUA320.recs_type_1000 to Work Collection LU FINREP Feb2010 (28/02/2010)

Produced by user LDM_LUA320 on vendredi 17 décembre 2010 at 14:44:42

Report	Cell	Cell Value	Record Contribution
FINREP LU B11_Equity (01-3)./L	[row7280|col1]	4467296,79	-152,60
FINREP LU B21_Income./L	[row710704|col1]	2896528,87	152,60
BCL S11 PASSIF./L	[2_100_XX_XXX_90000|BRX]	-6916520,21	-152,60

  - Drill down

0228_7_Bank XYZ_LUA7 IFRS Balances - RT1000 [33841 row(s), 0 error(s)] - Standard View | Drill up report | LU FINREP Feb2010 (28/02/2010) - FINREP LU B11_Assets (01-1)./L | Audit trail of c

Audit trail of report FINREP LU B11_Assets (01-1)./L (Partial) from Work Collection LU FINREP Feb2010

Delivery date: 28/02/2010

Produced by user LDM_LUA320 on vendredi 17 décembre 2010 at 14:48:04

FINREP LU B11_Assets (01-1),,row7250,col1 **1 756 986,09**

select sum((RCA_BOOKV)) from recs_type_1000 where ((recs_type_1000.plot_fk in (21) and recs_type_1000.status in (4,5)) and ((typ_lge_type=1 and cde_line_item like 'B11A%'))) and ((((cde_line_item='B11A_7250'))))

Data Origin	Product code	Type DF product	PRD_PRODUCT_LU	BCL Code	C072 : Origin - Detail	
0000001.090.799.978	141200. other receivables *	GL	0	<NULL>	n.a.	308 387,97
0000001.090.797.978	141200. other receivables *	GL	0	<NULL>	n.a.	440,06
0000001.090.650.978	140500. prepaid expenses *	GL	0	<NULL>	n.a.	47 935,61
0000001.090.645.978	140500. prepaid expenses *	GL	0	<NULL>	n.a.	1 174,62

Variance

- Between 2 set of data processed

Welcome Page | FRSGlobal ReportGenerator

Variance between Data Sets 20100228_7_Bank XYZ_LUA7 and 20080229_1_Bank XYZ_LUA1

Table to compare:	RM CREDIT RISK - RT6000
Value to compare:	Post-CRM Risk Weighted assets
Group by:	Position id
Absolute threshold:	1500
Percentage threshold:	15

Compare

Variance on table recs_type_6000 between Data Sets 20100228_7_Bank XYZ_LUA7 and 20080229_1_Bank XYZ_LUA1

The sum of column Post-CRM Risk Weighted assets was compared, grouped by column Position id

Percentage threshold: 15 %
Absolute threshold: 1500

Produced by user LDM_LUA320 on vendredi 17 décembre 2010 at 14:55:17

Sum				
Position id	**20100228_7_Bank XYZ_LUA7**	**20080229_1_Bank XYZ_LUA1**	**Diff**	**% Diff**
20 073 000	0	3 017 400	3 017 400	(N/A)
20 074 000	0	2 260 000	2 260 000	(N/A)
20 075 000	0	487 902	487 902	(N/A)
20 076 000	0	2 800 000	2 800 000	(N/A)
20 077 000	0	31 364	31 364	(N/A)
0000001.090.010.978	25 997	0	25 997	-100

Variance

- Between 2 work collections
  - Colour code in the report

title2		Assets	References	Carrying amount	Direct Line Item
code				1	
row710	**1.1**	**Cash and cash balances with central banks**	*CP*	**33 277 707,58**	B11A_7100
row711	**1.2**	**Financial assets held for trading**	*IFRS 7.8 (a)(ii); IAS 39.9*	**41 605 886,07**	
row711	1.2.1	Derivatives held for trading	*IAS 39.9*	32 675 121,05	
row711	1.2.2	Equity instruments	*IAS 32.11*	973,50	
row711	1.2.3	Debt instruments	*39.9*	8 929 791,52	
row711	1.2.4	Loans and advances	*39.9*		
row712	**1.3**	**Financial assets designated at fair value through profit or loss**	*IFRS 7.8 (a) (i); IAS 39.9*	**569 725 975,73**	
row712	1.3.1	Equity instruments	*IAS 32.11*		
row712	1.3.2	Debt instruments	*39.9*	288 420 071,17	
row712	1.3.3	Loans and advances	*39.9*	281 305 904,56	
row713	**1.4**	**Available-for-sale financial assets**	*IFRS 7.8.(d); IAS 39.9*	**641 320 056,99**	
row713	1.4.1	Equity instruments	*IAS 32.11*	5 679 169,38	
row713	1.4.2	Debt instruments	*39.9*	635 640 887,61	
row713	1.4.3	Loans and advances	*39.9*		
row714	**1.5**	**Loans and receivables (including finance leases)**	*IFRS 7.8.(c); IAS 39.9*	**1 545 304 917,01**	
row714	1.5.1	Debt instruments	*IAS 39 AG 26*		
row714	1.5.2	Loans and advances	*IAS 39.9*	1 545 304 917,01	
row715	**1.6**	**Held-to-maturity investments**	*IFRS 7.8 (b); 39.9*	**301 675 669,92**	
row715	1.6.1	Debt instruments	*IAS 39 AG26*	301 675 669,92	
row715	1.6.2	Loans and advances	*IAS 39 AG26*		

  - Analyse of underlying data

Work Collection LU FINREP Feb2008 (29/02/2008) and Work Collection LU FINREP Feb2010 (28/02/2010) | Report Variance | LU FINREP Feb2010 (28/02/2010) - FINREP LU B11_Assets (01-1)./L

Variance of report FINREP LU B11_Assets (01-1)./L on cell [row7100|col1] between Work Collection LU FINREP Feb2008 (29/02/2008) and Work Collection LU FINREP Feb2010 (28/02/2010)

Produced by user LDM_LUA320 on jeudi 25 novembre 2010 at 15:23:01

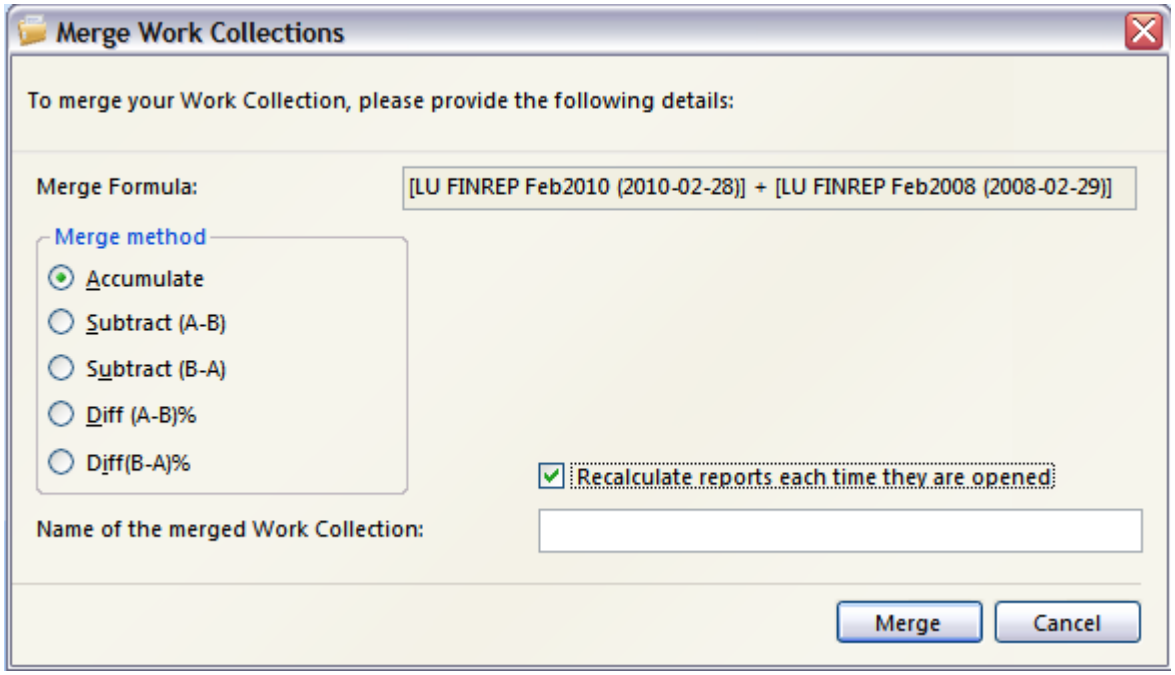
Table to compare:	IFRS Balances - RT1000 [recs_type_1000_1]
Dimension to analyze:	rt1000_id

Compare

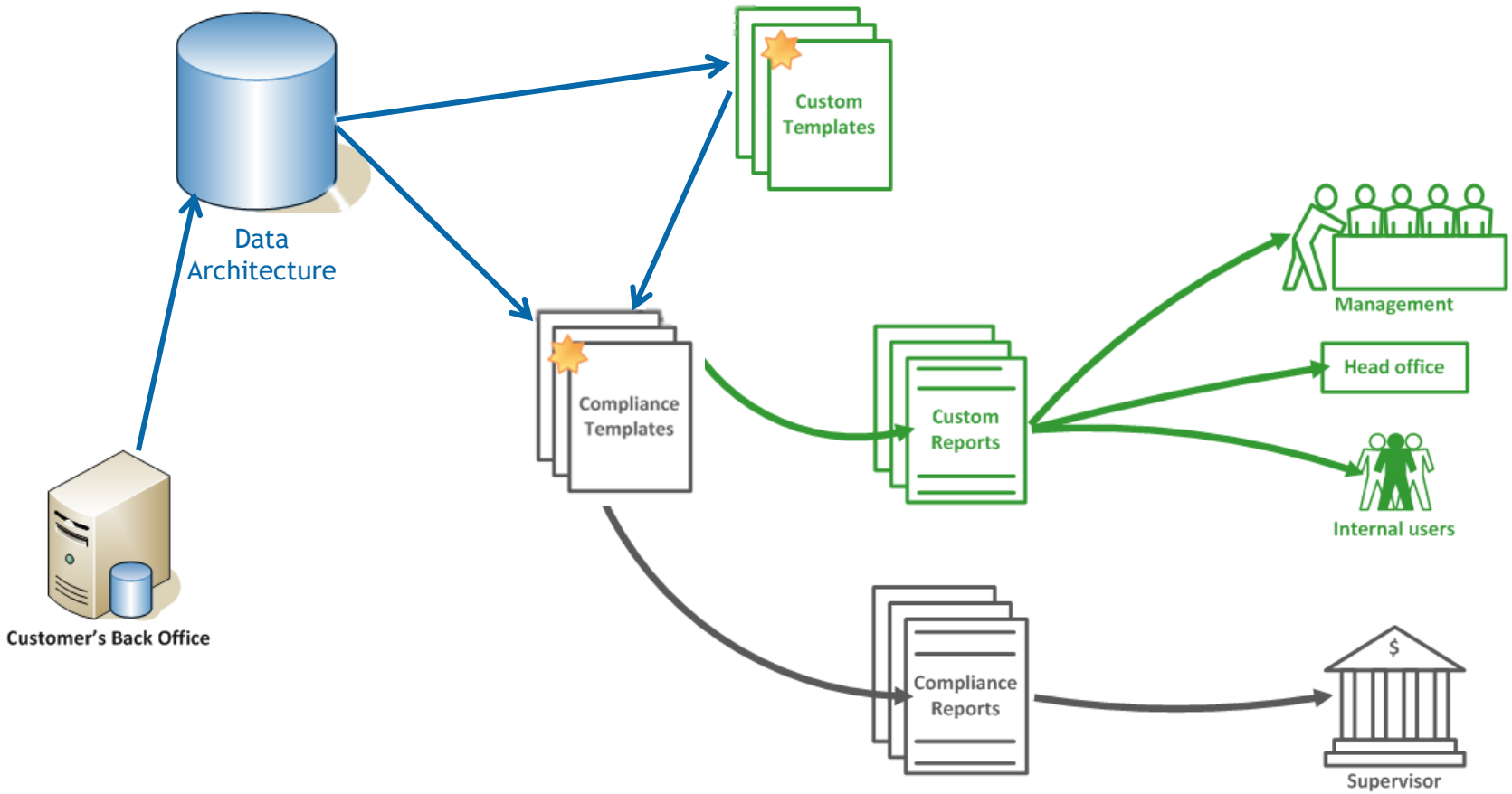
rt1000_id							
	LU FINREP Feb2008 (29/02/2008)		LU FINREP Feb2010 (28/02/2010)		Difference		
rt1000_id	Value	Nb Rec	Value	Nb Rec	Value	%	% Variance
59946			1 245 644,07	1	1 245 644,07		101%
129316	6 410,50	1			-6 410,50	-100%	
129317	-0,01	1			0,01	-100%	
Total	**6 410,49**	**2**	**1 245 644,07**	**1**	**1 239 233,58**		**100%**

Variance

- Merge between 2 work collections
  - The reports created show new calculated values



Reporting workflow



Features and functionality

- Produce your reports
  - Integrated environment
  - Fully automated process
  - Import pre-defined Excel reports vs. creation from scratch
  - Support for formulas
  - Support for multi-languages
  - Allocation rules builder for complex conditions
  - Static and Dynamic reports
  - Use of Referencing/Copy
  - Top X reporting
  - N-X reporting

Features

- Save time when creating your reports
  - Multiple edition
  - Parameterized reports
  - Generator
- Finalize your reports
  - Intra and inter-reports validation
  - Security
  - Cell formatting toolbar
  - Properties grid
- Review your reports
  - Allocation Visual Cues
  - Export/import XML

Benefits

- Business user friendly
- One environment for all reports
  - Complex report capability
  - Streamline your processes
- All reports use the same data
  - Leverage Summix Data Architecture
  - Consistent reports
  - Ensure "*single version of the truth*"
  - No reconciliation required
- Exploit all functionality of Summix for Regulatory Reporting
  - Audit
  - Variance analysis
  - …

Summix Liquidity Risk Solution

Wolters Kluwer
Financial Services

When you have to be right

Liquidity Risk Solution

Liquidity Gap Analysis

- Marginal, cumulative & residual
- Funding & market liquidity risk

Contingent Gap Analysis

- Segregation according to the source: contract determined, prepayments, etc

Repo Analysis

Dynamic Gap Analysis

- Inclusion of new production & rollovers

Liquidity Ratios

- Liquidity Coverage Ratio (LCR)
- Net Stable Funding Ratio (NSFR)
- Concentration & diversification ratios

Scenario Modeling

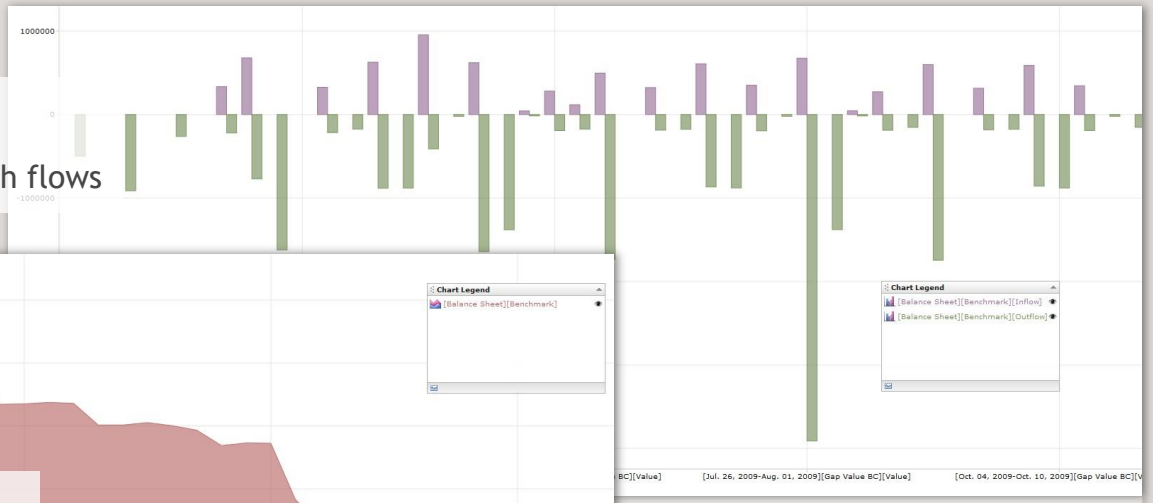
- Unlimited number of scenarios
- Combination of market, credit & behavioural stress

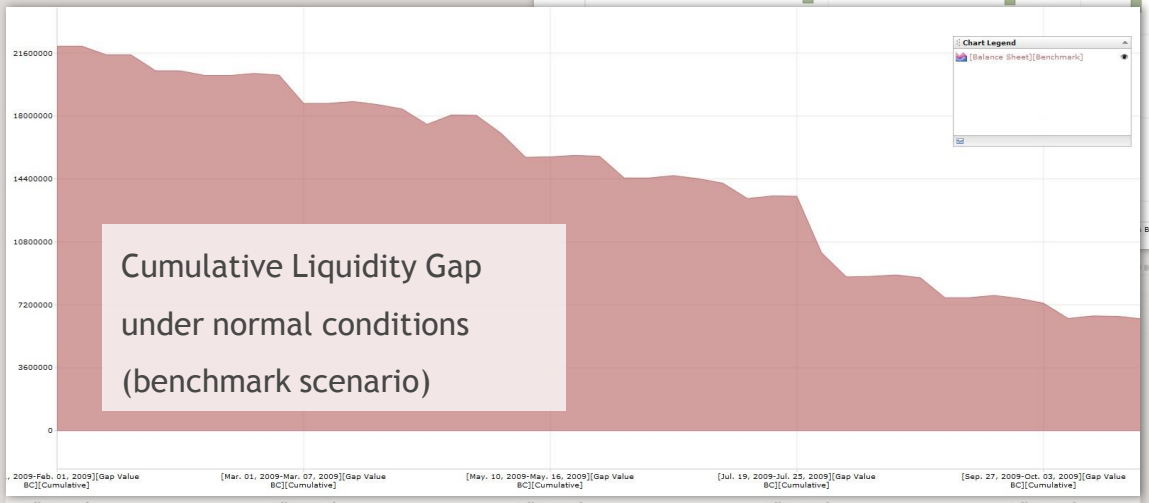
Results on Liquidity Risk Financial Analysis

Survival Period Report under Normal Conditions

Marginal Liquidity Gap

display all inflow & outflow cash flows





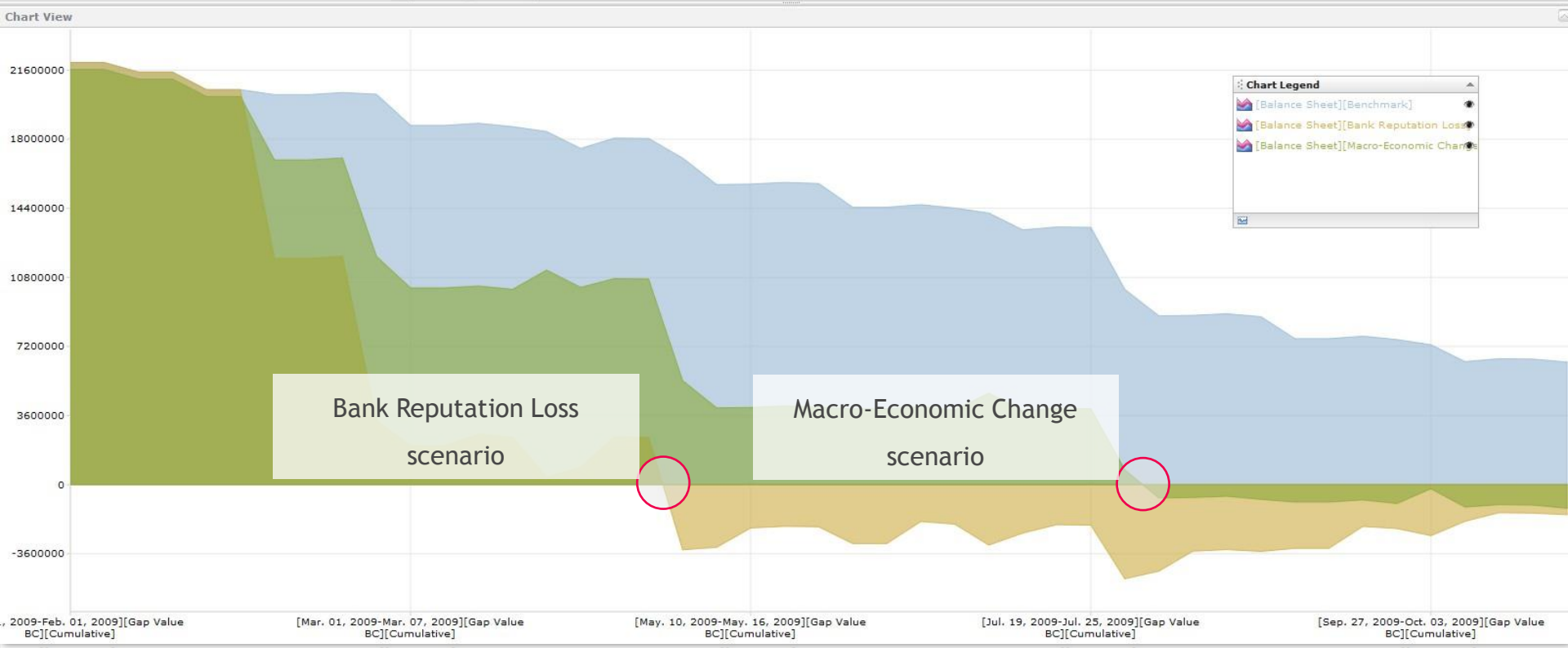
Cumulative Liquidity Gap

under normal conditions

(benchmark scenario)

KPIs and reporting

Contract	Static Scenario	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative
Balance Sheet	Benchmark	21,996,530.02 EUR	21,996,530.02 EUR	21,496,530.02 EUR	21,496,530.02 EUR	20,583,624.95 EUR	20,583,624.95 EUR
	Bank Reputation Loss	21,998,039.43 EUR	21,998,039.43 EUR	21,498,039.43 EUR	21,498,039.43 EUR	20,585,134.36 EUR	20,585,134.36 EUR
	Macro-Economic Change	21,634,026.17 EUR	21,634,026.17 EUR	21,134,026.17 EUR	21,134,026.17 EUR	20,221,121.10 EUR	20,221,121.10 EUR



Basel III – Global Liquidity Standard

Liquidity ratios (short & long term):

- Liquidity Coverage Ratio

  30-days horizon

$$LCR_d = \frac{\text{Stock of high quality liquid assets}}{\text{Net cash outflows over a 30 days time period}} \geq 100\%$$

- Net Stable Funding Ratio

  1-year horizon

$$NSFR = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} > 100\%$$

Survival period:

$$\text{SP} = \sum \text{Net cash flows}_t > 0$$

Concentration and diversification:

- Counterparty, product funding

$$CC_i = \frac{\text{Funding liabilities sourced from counterparty}_i}{\text{Firm total balance sheet}}$$

$$CP_i = \frac{\text{Funding liabilities sourced from product}_i}{\text{Firm total balance sheet}}$$

Liquidity Coverage Ratio reporting

Ratios are integrated in the BCBS reporting template

Configuration | Data | Reporting | Process | Custom | Administration

ReportGenerator ▸ Reporting ▸ Editor ▸

- Work Collections
  - WKFS - Liquidity (17/1/2012)
    - LCR.Liquidity (2012-03-05)
    - NSFR.Liquidity (2012-03-05)
    - Parameters.Liquidity (2012-0

WKFS - Liquidity (17/1/2012) - LCR.Liquidity (2012-03-05)

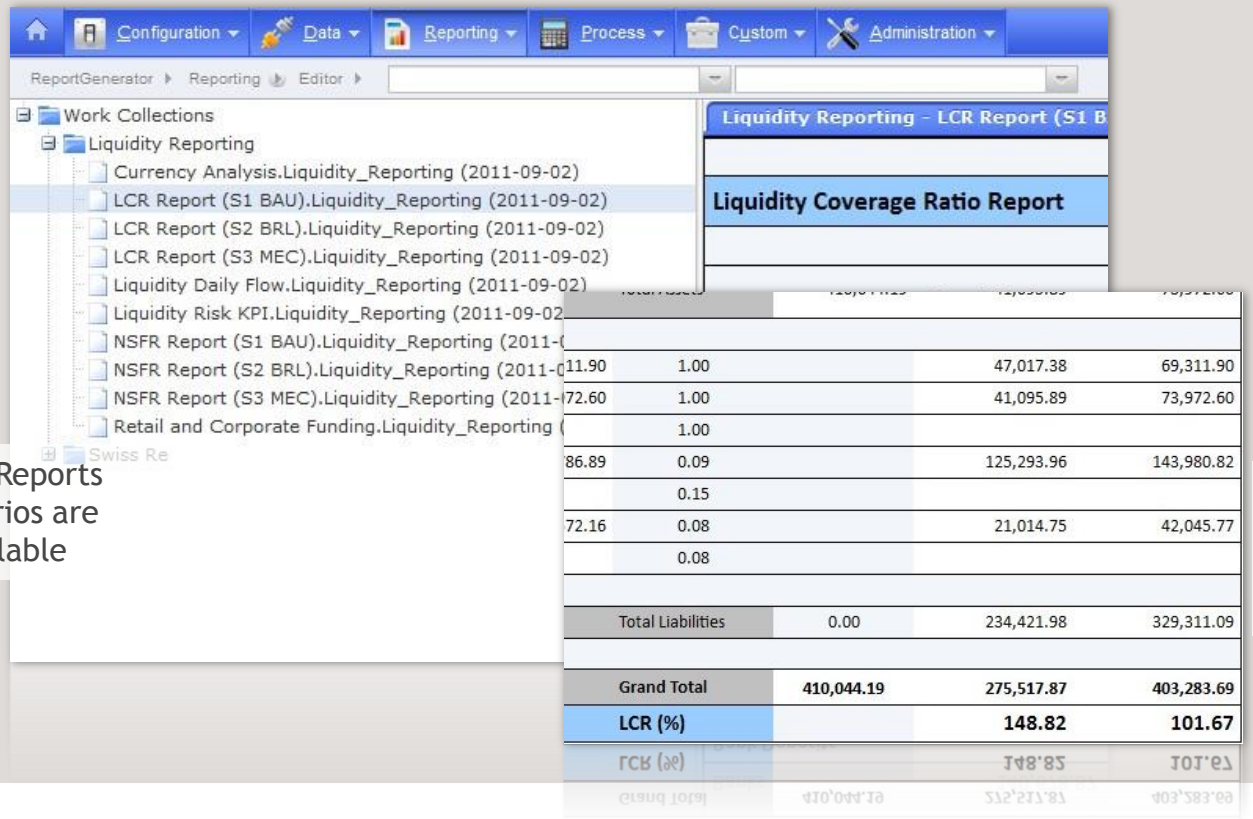
	label2	label3	Col1	Col2	Col3	Col4	Col5
Header1	LCR						
Header2	A) Stock of high quality liquid assets						
Row1	a) Level 1 assets						
Row8	Securities with a zero risk weight:	40 (c)					
Row9	issued by sovereigns	40 (c)	90,000			1	90,000
Row10	guaranteed by sovereigns	40 (c)	50,000			1	50,000

D) LCR

Total stock of high quality liquid assets plus usage of alternative treatment	531,950		
Net cash outflows	367,835.95		
LCR	1.44		

LCR & NSFR ratios

Ratios are integrated in our solution including stress values



NSFR & LCR Reports
Three scenarios are directly available

LCR Report
Two time horizons:

- <1 weeks
- <1 month

Dashboarding

NSFR

RWA and Capital Charge per counterparty

Flags when limits are broken

LCR

CVA per counterparty

Basel III Dashboard

Date: 31/12/2013
Currency:EUR

Global Liquidity Standard

Net Stable Funding ratio

Available Stable Funding

Scenario	Horizon 1 month	Horizon 1 year
Benchmark - Firm specific scenario	288'710'851.85	238'280'404.66
Stress - Bank reputation loss	269'115'659.62	219'704'803.54
Stress - Macro economic changes	633'870'760.05	845'150'076.60

Required Stable Funding

Scenario	1 month	1 year
Benchmark - Firm specific scenario	147'011'731.09	93'956'604.44
Stress - Bank reputation loss	144'700'978.14	95'371'042.82
Stress - Macro economic changes	1'001'812'107.91	1'898'622'469.75

NSFR Ratio

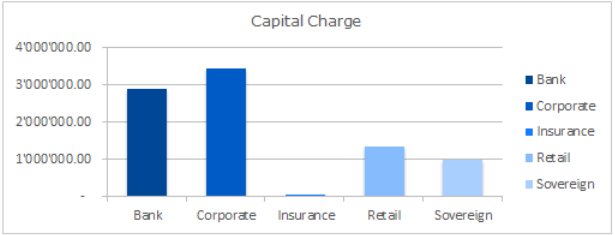
Scenario	1 month	1 year
Benchmark - Firm specific scenario	196%	254%
Stress - Bank reputation loss	186%	230%
Stress - Macro economic changes	63%	45%

Capital Adequacy

Capital Charge

Per Counterparty Class

Class	RWA	Exposure at Default	Capital Charge
Bank	36'396'331.35	181'270'305.35	2'911'706.51
Corporate	43'339'900.25	204'806'889.05	3'467'192.02
Insurance	901'493.64	5'073'305.07	72'119.49
Retail	16'805'737.60	76'661'856.01	1'344'459.01
Sovereign	12'622'725.00	60'101'000.00	1'009'818.00
Total	110'066'187.85	527'913'355.48	8'805'295.03



Liquidity Coverage Ratio

High Quality Liquid Asset

Category		% of HQLA
Level 1	5'090'000.00	64%
Level 2A	1'028'500.00	36%
Level 2B RMBS	1'105'590.16	23%
Level 2B Others	753'811.48	
Total	7'977'901.64	

LCR Ratio

Scenario	Horizon 1 week	Horizon 1 month
Benchmark - Firm specific scenario	506%	314%
Stress - Bank reputation loss	149%	86%
Stress - Macro economic changes	253%	136%

Credit Valuation Adjustment

CVA calculation per counterparty

Counterparty Name	Portfolio - Real Estate/Retail Customer/Mr. Doe
Risk Weight	0.80%
Maturity	4.73
Exposure at Default	9'795.81

Wolters Kluwer
Financial Services

Thank you

Visit us

www.wolterskluwerfs.com

www.reportum.lv