Whitepaper: CVA Services

AnaCredit, Loan Exposure, and regulated IFRS 9

Dear Sir/Madam,

we would be happy to discuss with you any further comments you may have.

Please do not hesitate to contact our Senior Financial Engineer Stephan Tilch on +49 69 974 611 43 or by email: Stephan.Tilch@cva-services.eu

Yours sincerely,

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Management Summary

AnaCredit means Analytical Credit Datasets. AnaCredit is a draft regulation published by the European Central Bank. Since AnaCredit will request detailed data to individual loans, its implementation opens a wide field of potential synergies with the implementation of **IFRS 9**, a new accounting standard for financial loan instruments. Data, collected for AnaCredit, can be used for the new classification according to IFRS 9. And vice versa, AnaCredit requires accounting data with explicit reference to IFRS 9.

Therefore the combination of both implementations seems just natural and will help to set up a stable and efficient workflow in credit institutions. Following European banking authority and Bundesbank's current view on AnaCredit this whitepaper supports the early implementation of IFRS 9.

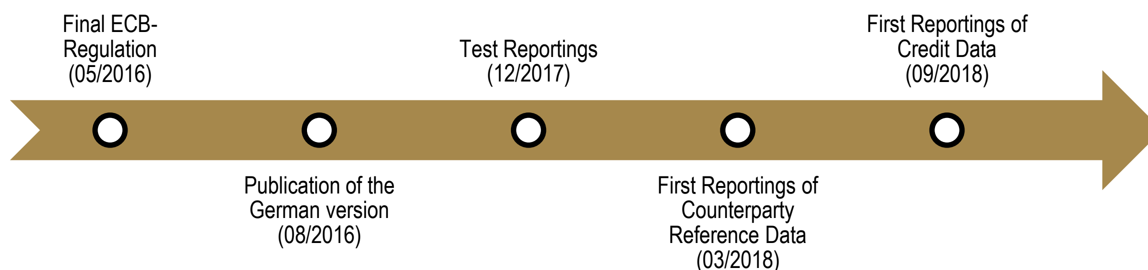
The Joint Committee of the European Supervisory Authorities (EBA, EIOPA, ESMA - ESAs) published on May 13th 2016 its Opinion on the European Commission's (EC) intention to amend the draft Implementing Technical Standards (ITS) on the mapping of External Credit Assessment Institutions' (ECAIs) credit assessments under the Capital Requirements Regulation (CRR) and Solvency II Directive. The Opinion was produced in response to the EC's proposed amendments to these draft ITS.

AnaCredit, one of the main topics of this paper, should be considered in the context of a holistic risk management framework. The figure below provides a quick overview:

Focus Area	Retail credit risk	Wholsale credit risk
Credit analysis	• Statistical including heuristics and use of non-structural data • Behavioral • Product focused • Highly automated	• Deal focused and credit type focused • Detailed T&Cs requiring sophisticated facilities management system • Market conform models potentially incorporating liquid capital markets pricing
Risk Management	• Risk scoring for all products • Scoring methodology by category, strong use of aggregates in models • Diversification and securitization • Risk management capability bundled into pricing and risk & control highly distributed	• Diversification, hedging and securitization • Simulation based modeling • Deal by deal models • Strong focus on interest rate risk
Reporting	• Reporting based on aggregates • Operational reporting driven by core banking platforms • Multiple and varied systems need to be consolidated • Data privacy and fairness reports	• Enterprise credit risk/credit portfolio management and ALM systems are key sources of data for reporting • Collateral management reporting is a core part of the reporting system • Risk management reporting for risk components of loans such as interest rates etc.

What is AnaCredit "Analytical Credit Datasets"?

AnaCredit is a regulation published by the European Central Bank on May 18th 2016. The main goal of the AnaCredit project is to set up a dataset containing granular credit and credit risk data. For this purpose the reporting entities will have to send detailed information on individual bank loans to the ECB, harmonized across the euro area. The regulation will apply from September 2018 on at the earliest.

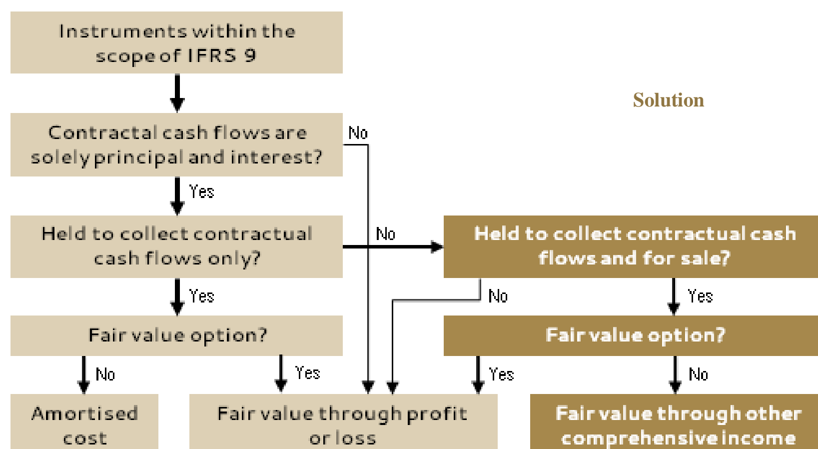


The motivation behind AnaCredit is mainly a better support for the tasks of the ECB, namely monetary policy analysis, risk management and financial stability surveillance. The ECB is aware of the cost of reporting agents and tried to balance the reporting burden with the benefits of a new dataset. However, credit institutions can benefit from AnaCredit, too. The infrastructure for the new reporting duties can be used to fulfill other regulatory frameworks at the same time. Such synergies exist between AnaCredit and the new accounting standard for financial instruments, IFRS 9.

IFRS 9 – Accounting of Financial Instruments

IFRS 9 is the new accounting standard of the IASB for financial instruments. As such it replaces the old standard IAS 39. IFRS 9 is divided in three main phases, which covered the topics (1) classification and measurement of financial assets, (2) impairment and (3) hedge accounting.

The classification of financial instruments follows now simpler rules compared to the old IAS 39 standard. It is based on the nature of the contractual cash flows and on the business model. The resulting classification is needed for AnaCredit, too. See the next figure for more details:



Solution

The core change from IAS 39 to IFRS 9 is the switch from an Incurred-Loss-Model to an Expected-Loss-Model for impairment. The main tasks for the implementation of the new impairment regulations are categorization and modeling. First of all financial assets have to be allocated to one of the three categories "performing", "underperforming" or "non-performing". IFRS 9 defines some requirements for this classification, i.e., it has to be based on the probability of default and not the expected loss. Since these requirements tend to remain vague, the implementation of the classification is a good occasion to fine-tune accounting.

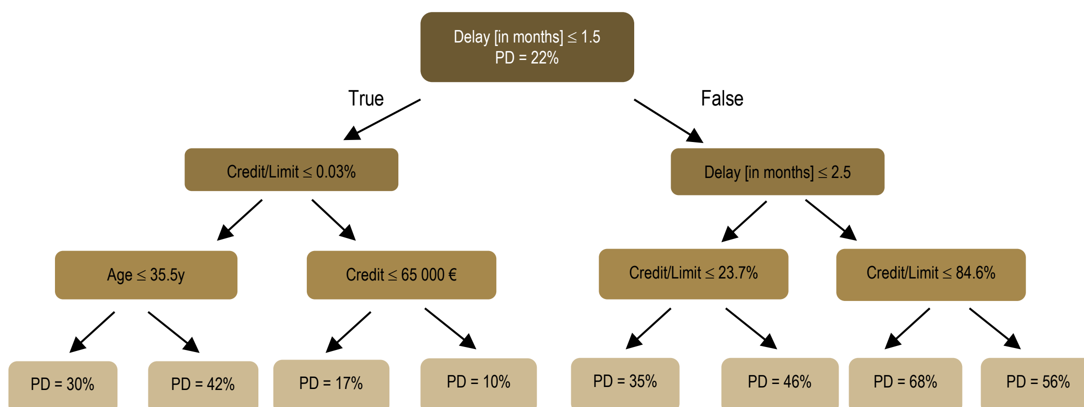
Perhaps the biggest challenge for the introduction of the new standard is the modeling of the expected loss. Although the expected loss may be calculated already for pricing or regulatory purposes (Basel II/III), IFRS 9 comes with specific requirements which will definitely need some effort. However, our solutions try to strike a good balance between accuracy and reasonable effort. For this we make use of existing calculations and models as much as possible. Therefore we recommend a modular calculation of the expected loss via the formula: $EL = PD * EaD * LGD$

The Exposure at Default (EaD) of certain assets can be derived from existing CVA calculations. A simple, yet absolutely sufficient method for this is the SA-CCR, The new standardized approach for measuring counterparty credit risk exposures. The Loss Given Default (LGD) can partly be derived from historical data, partly from the liabilities belonging to the particular loan – again a possible synergy of implementing AnaCredit and IFRS 9 in parallel.

For the modeling of the probability of default (PD) we offer different solutions depending on the availability of data and methodologies your institution is using.

Some institutions work already with existing internal models for Basel requirements, therefore hold infrastructure for stresstesting and forecasts of Default Rates. An adjustment of these available values and models seems to be the most efficient way. Such adjustments are necessary since IFRS 9 requires point-in-time PDs in contrast to the Basel requirements. Information about past events, current conditions, and forecasts of the future depending on their availability without incurring undue costs and effortneed to be taken into consideration.

Smaller institutions may work with the standardized approach in credit risk without using internal models. In these cases we could help with different machine-learning technologies. These data mining techniques can be implemented quickly and will find the best way to estimate the PD of a certain portfolio based on historical data. Together with public forecasts these PDs should fulfill all IFRS 9 requirements. See below an example figure of a decision tree for individual loans:



PD	Samples (abs.)	Samples (rel.)
0 – 20 %	20638	68,8 %
20 – 45 %	2761	9,2 %
> 45 %	6601	22,0 %

The third phase covers hedge accounting. The changes are not as significant as for impairment. The accounting of a hedging instrument will remain the same. The weakness of the old IAS 39 were some restrictions e.g. for the hedged items. Risk components of non-financial items could not be hedged, following the old standard. Therefore the new hedge accounting rules will be of interest for those houses whose risk management standards were not adequately reflected in accounting. This will be particularly relevant for non-financial institutions.

The IASB offers the option to keep the old IAS 39 standard for hedge accounting due to different projects concerning macro hedging and dynamic risk management (discussion paper published in April 2014). The completion cannot be foreseen at the moment. If IAS 39 represents your risk management standards correctly this option is a good opportunity to reduce costs and effort.

About CVA Services

CVA Services GmbH is a leading consultancy firm in Germany in the field of financial risk management. Our consultancy expertise is focused on market, credit, liquidity and operational risk management and extends from accounting to IT service implementations within the risk control and trading departments of financial firms. Providing Managed Services for CVA and exposure calculations based on Basel III and IFRS 13 our company is in the process of extending its activities to the European markets.

In particular we support our clients in change management within their IT systems and processes in the light of new regulations.

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