www.pwc.com

EBA Credit Risk:Definition of Default

Issues on the application of the default definition



Contents

reface	5
overview	9
hallenges	
olution	29

Preface

On March 4th 2015 the European Banking Authority (EBA) published a discussion paper on the "Future of the IRB approach". In this paper the EBA sets out the agenda for future improvements of the regulations in order to enhance the comparability of the internal risk estimates and capital requirements of European institutions and also to improve the transparency of the models and their outcomes.

Based on previous reports prepared, the EBA identified several areas within the IRB that still showed a too high degree of flexibility in the application and also differences in the supervisory approaches with respect to the definition of default, PD and LGD calibration, treatment of defaulted assets and the use of the IRB.

* EBA published both the final RTS and Guideline.

As part of the work program laid out in the "Future of the IRB approach" EBA has published the following two documents:

- Final Report on Draft Regulatory Technical Standards (RTS) on the materiality threshold for credit obligation past due under Article 178 of Regulation (EU) 575/2013 from 28th September 2016 specifying the conditions according to which a competent authority shall set the materiality threshold for past due credit obligations in order to ensure consistency in the setting of the materiality threshold across the EU.
- Final Report on Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013 from 28th September 2016.

The report contains detailed clarification of the definition of default in order to harmonize the application across member states in the following areas:

- Days past due criterion
- Unlikeliness to pay
- External data
- Return to non defaulted status
- Consistency of the application
- Retail exposures
- Documentation and internal policies

Assessment methodology for IRB approach

In addition to these two EBA documents, additional information on the interpretation of the definition of default can be obtained from the final draft RTS on the **Assessment methodology for IRB approach**. This RTS will replace the previous CEBS's GL10 ('Guidelines on the implementation, validation and assessment of AMA and IRB approaches') and is aiming at harmonization of the supervisory assessment methodology for IRB approaches across all EU member states.

Kind regards,

Martin Neisen Global Basel IV Leader Luis Filipe Barbosa Global Basel IV Internal Models Credit Risk Workstream Leader

Overview

Overview

What potential changes with respect to the definition of default do banks need to be aware of? As stated in the preface, the main regulatory developments on the interpretation of the default definition result from the three following EBA documents:

Fig. 1 EBA Papers on default definition



Fig. 2 Main topics in the EBA papers on default definition



- Conditions for national Supervisory Authority to set materiality thresholds



Definition

- · Covers several key aspects
- comparability how banks apply regulatory requirements to their capital positions



- Standards for the supervisor on the assessment of minimum IRB requirements
- - by all relevant authorities

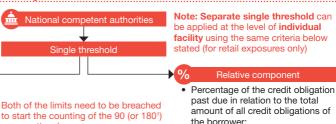
Challenges

RTS on the materiality threshold for past due credit obligations (EBA/RTS/2016/06)



Competent authorities define the nature of the thresholds, set the maximum level of the thresholds and define the implementation time:

Fig. 3 Materiality threshold for past due obligations



than 90 days (or 1801) days in a banking group; Lower or equal to €100 for retail

Absolute component

Sum of all amounts past due more

exposures, and €500 for all other exposures.

to start the counting of the 90 (or 1801) consecutive days

 Lower or equal to 1%. Competent Authorities can raise this level up to 2.5%.



- Thresholds shall be applied no later than 31 December 2020 and remain consistent over time.
- · Major impacts in the calculation of RWA/EL, and indirectly on other exposures through PD/LGD estimates.

¹ For exposures secured by residential or SME commercial real estate in the retail exposure class, as well as exposures to public sector entities.

Guidelines on the application of the definition of default under Article 178 CRR (EBA/GL/2016/07)



The proposed definition of default addresses a wide range of topics. Mainly it proposes some **quantitative indications of default**:

- · Level of application of the default definition for retail exposures
- Pulling and contagion effect for retail exposures
- · Materiality threshold for retail and non-retail exposures

Some specific credit risk adjustments (SCRA) are mentioned as **qualitative indications of default** like:

- · Distressed restructuring
- Sale of credit obligations
- · Institute-specific indications of unlikeliness to pay

Requirements on application article 178 of CRR on the definition of default



Past due criterion Counting of Days Sum of all amounts past due on a group

measurement
 Avoidance of technical default

wide basis and a daily

Indications unlikeliness to pay

- Non-accrued status
- Credit risk adjustments
- Sale of credit obligations
- Distressed restructuring
- Bankruptcy
- Other indications
- Governance process

External data

- Alignment of the internal vs. external default definition
- Quality of associated documentation
- Assess impact from conceptual differences
- Apply margin of conservatism

Return to a non-default status	Consistency of application	Retail exposures	Documentation, internal policies, risk management
Minimum conditions for a reclassification to a non-defaulted status Monitoring of the effectiveness of the policy	Ensure the default of a single obligor is identified across all exposures and entities Default across different types of exposures	Level of application reflecting risk management practices Facility level default indications, including implementing a pulling effect criterion Obligor level, with relevance to the treatment of joint exposures	Timeliness of the identification of default Default definition policies Internal governance (approval, validation and review)



Past due criterion Indications unlikeliness to pay External data

- 1. Counting of days past due: Harmonisation of the counting of days past due is predominantly achieved through the definition of the materiality threshold. However, if the credit arrangements allow the client to change the schedule, suspend or postpone the payments under certain conditions, the changed, suspended or postponed instalments should not be considered past due;
- 2. Sum of all amounts past due: The sum of all amounts past due should be calculated on group basis with a frequency allowing timely identification of defaults, preferably on a daily basis. Information about the number of days past due and default should be up-to-date whenever it is used for decision making, risk management, reporting and capital requirements calculation;
- 3. Avoidance of technical default: Criteria for a technical default are data or system error of the bank, result of the non-execution, defective or late execution of payment transactions ordered by the obligor, time lag between the receipt of the payment and the respective allocation to the relevant account and factoring arrangements where none of the receivables to the obligor is past due more than 30 days.

Return to a non-default status	Consistency of application	Retail exposures	Documentation, internal policies, risk management

- Specific credit risk adjustments:
 Banks should analyse the reasons for the sale (credit risk related or not?), quantify the economic loss (>5%?) and assess whether it is an individual sale or a portfolio sale;
- 2. **Distressed restructuring:** Banks have to define the scope of distressed restructured credits, quantify the level of diminished financial obligation (>1%?, considering the EIR at origination) and to set indicators that may suggest unlikeliness to pay notwithstanding the diminished financial obligation being lower that 1%;
- 3. Other indications of unlikeliness to pay: Banks should have in place specific documentation of additional indicatiors of unlikeliness to pay and use available external databases (e.g. credit registers). They should also define conditions for a client cross default in a group of connected clients (contagious effect);
- 4. Governance process: Banks have to establish a consistent and effective application of the default definition (clear policies and procedures in place for all business lines, legal entities and geographical locations).

Overview Challenges Solution



Past due criterion

Indications unlikeliness to pay

External data

- Alignment of the internal vs. external default definition: The sample used for the purpose of the estimation of risk parameters has to be homogenous and representative of the institution's portfolio, including the definition of default that was applied;
- Quality of associated documentation: Banks shall document sources of external data, the default definition used in external data, the performed analysis and all identified differences;
- Assess impact from conceptual differences: Institutions should assess the differences between the definitions of default used internally and in external data as well as their impact on the default rate;
- 4. Apply margin of conservatism: Whenever banks are not able to make all necessary adjustments or demonstrate that certain differences are negligible in terms of the impact on all risk parameters and own funds requirements, a margin of conservatism is to be added.

Return to a non-default status	Consistency of application	Retail exposures	Documentation, internal policies, risk management
		•	

- 1. Minimum conditions: No trigger continues to apply, specific treatment for distressed restructured exposures;
- 2. **Probation period:** Minimum of 3 month without any default trigger, different probation periods for different types of exposures, minimum of 1 year for distressed restructured exposures;
- 3. Monitoring of the effectiveness of the policy: Banks need to define clear criteria and policies for returning to non-default status and quantify the number of multiple default cases.

Overview Challenges Soluti



Past due criterion

Indications unlikeliness to pay

External data

- Consistent definition of default: Use of different definitions of default across different exposure types or legal entities possible in very specific situations. Use of different definitions needs to be clearly documented and consistent with internal risk management practices;
- Consistent identification of default of single obligor: Banks need to establish adequate procedures and mechanisms to ensure that the default of a single obligor is identified across all exposures in all legal entities and geographical areas (unless implementation is very burdensome and effect is immaterial).

- Level of application for retail exposures: Definition of default on obligor level or facility level possible. Use of the
 level should reflect internal risk management practices, and clear specification of the scope of application of different
 default definitions in place;
- 2. **Definition of default on facility level:** While the use of the default definition on facility level is possible, some indications of default are related with the condition of the obligor rather than the status of a particular exposure (e.g. bankruptcy) and need to be considered accordingly;
- 3. Definition of default on obligor level: Clear definition for the treatment of joint exposures (two or more obligors equally responsible for the repayment of the obligation) required. Specific concept for recognising effects of single obligor defaults on joint exposures and default of joint exposures to other joint exposures required.



Past due criterion	Indications unlikeliness to pay	External data

Return to a non-default status	Consistency of application	Retail exposures		tion, internal management

- Timeliness of the identification of default: Timely default flagging (e.g. daily for automatic processes), and regular assessment of all forborne non-performing exposures;
- 2. Documentation: Banks need to document the default definition policies regarding all default triggers, entry and exit criteria, scope of application, sources of information, responsibilities/ownerships, return to non-default status (quarantine), operationalization processes (including updates, automatic ss. manual mechanisms), and updated register of all current and past versions;
- 3. Internal governance: Adoption of adequate processes to ensure that definition of default is used in a consistent manner. Internal Audit has to regularly review the robustness and effectiveness of the process for the definition of default.

Overview Challenges Solut

Challenges



In order to assess whether the institution effectively identifies all defaults in accordance with Article 178 of Regulation (EU) No 575/2013, competent authorities shall verify in particular the following:









- All defaults are identified in a timely manner;
- Definitions and triggers of default are sufficiently detailed;
- Ensure that once default is identified for an obligor all exposures to that obligor are defaulted.





Reclassification to a non-default status

- Triggers for reclassification are defined for each trigger of default:
- Reclassification is possible only after no trigger of default applies;
- Triggers are sufficiently **prudent**.

Default triggers

- Ensure adequate policy is in place with regard to the counting of days past due;
- All the default triggers are included;
- Scope of application is clearly specified and differences justified for each definition of default when different definitions are used within or across legal entities.

Solution

Overview Challenges Solution

Your solution: Our three phase approach

We can help you respond to the upcoming regulatory changes. To anticipate unexpected impacts and preserve reputation we propose three phase approach.

Fig. 5 PwC three phase approach



Step I: Review

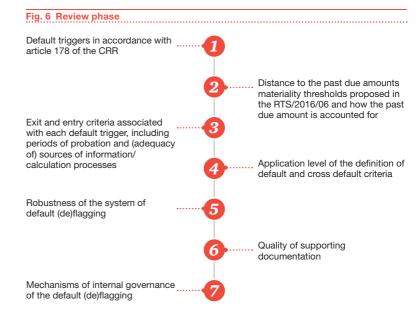


Step II: Prepare & GAP-Tool



Step III: Implement





Overview Challenges Solution



Fig. 7 Prepare phase & GAP-Tool

Detailed gap analysis of the actual default definition against EBA regulatory standards

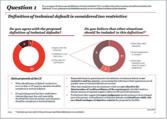
2 Revision of internal policies and procedures regarding the identification of defaults

Preparation of a material change application

PwC GAP-Tool

The work of our international network for many of the largest global financial services firms provides us with significant exposure to leading practices. To design a GAP-Tool, PwC evaluated all received responses from participating financial institutions to each question of a consultation paper regarding definition of default and summarized them qualitatively and quantitatively, focusing on the respondents' key points.



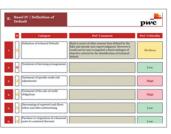




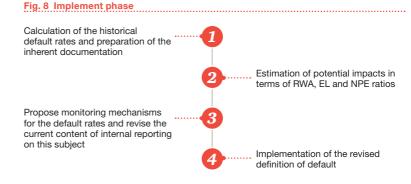
After a deep market analysis we designed our GAP-Tool. With the help of our tool we identify what needs to be done, before we choose the best solution and propose all relevant actions. To analyze the current situation, we use a list of questions and weight and rate the answers you give. The result is a report including diagrams showing the current situation. With the help of our expert knowledge we will find a solution to finally bridge the gap.



g, Basel IV Definition of Default Questionnaire		Participants Participants Patri		Per to had		pwc		
			0.	nation Land			Category I	and .
Charles of the Control of the Contro	-	-	_	T-rept	-	- Trees		-
Dr. coa base wher manus than error in data of IT extens				40	-			
				100	-			
Seclarited defaulted								
Dr. you charly distinguish between could related and non								
code wined dramatumes with regards to technical defaults?		Tion	200	2070	900			
		No.		100				
Would't be out for you to implement a flood continger of								
Transport of General Street Was Adjusted to								
Territor or the case of the analysis of								
Discounting of expected each flows believe and after	Yes					85		
motivatoring								
Parties of origination of a Tourish and at a	Yes					83	200	- 74
Particular States of the State								
non-defination								
No. of the second states and a finish of the second								
The real made an exception for busin under districted								
Parting mylering missions for probation potted?				2015				
De year our expert judicions for more floubility or have a								
possibility for an instantiant return from default to com-		Yes		20%				
COLUMN TO SERVICE AND SERVICE AS A SERVICE A								
ented registrations are to Reference or Reference to								
History Advisors of Applicate and of the								
	Yes					-		
NAME AND POST OFFICE ADDRESS OF THE PARTY.								
	Yes					100		







Contacts

Our Expertise

Whether regarding the Basel Committee, EU-regulation or national legislation – we use our established know-how of the analysis and implementation of new supervisory regulation to provide our clients with high-quality services. Embedded into the **international PwC network**, we have access to the extensive knowledge of our experts around the world.

PwC's Global Basel IV Initiative was established to support you in all aspects of getting compliant with the new regulatory requirements to the **definition of default**.

PwC can draw on long lasting experience of implementing new regulatory requirements by supporting a number of banks in completing quantitative impact studies prior to the implementation of **Basel II and Basel III** and by the functional and technical implementation of the final regulations. The PwC-tools used during the QIS are flexible and will be updated automatically in case of new consultations by the Basel Committee.

About us

PwC helps organisations and individuals create the value they're looking for. We're a network of firms in 157 countries with more than 195,000 people who are committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at www.pwc.com. Learn more about PwC by following us online: @PwC_LLP, YouTube, LinkedIn, Facebook and Google+.

Contacts

Global Basel IV Leader Martin Neisen

Tel: +49 69 9585-3328 martin.neisen@de.pwc.com

Global Basel IV Internal Models Credit Risk Workstream Leader Luis Filipe Barbosa

Tel: +351 213 599-151 luis.filipe.barbosa@pt.pwc.com

Austria

Andrea Wenzel

Tel: +43 1 501 88-2981 andrea.x.wenzel@at.pwc.com

Australia

Katherine Martin

Tel: +61 (2) 8266-3303 katherine.martin@au.pwc.com

Belgium

Alex Van Tuykom

Tel: +32 2 710-4733 alex.van.tuykom@be.pwc.com

CEE

Jock Nunan

Tel: +381 113302-120 jock.nunan@rs.pwc.com

Cyprus

Elina Christofides

Tel: +357 22555-718 elina.christofides@cy.pwc.com

Denmark

Janus Mens

Tel: +45 3945-9555 janus.mens@dk.pwc.com

Lars Norup

Tel: +45 3945-9195 lars.norup@dk.pwc.com

Estonia

Ago Vilu

Tel: +372 614-1800 ago.vilu@ee.pwc.com

Finland

Marko Lehto

Tel: +358 20 787-8216 marko.lehto@fi.pwc.com

France

Marie-Hélène Sartorius

Tel: +33 1 56575-646 marie-helene.sartorius@fr.pwc.com

Germany

Thomas Siwik

Tel: +49 211 981-1318 thomas.siwik@de.pwc.com

Greece

Georgios Chormovitis

Tel: +30 210 6874-787

georgios.chormovitis@gr.pwc.com

Hong Kong

Kishore Ramakrishnan

Tel: +852 2289-1983 kishore.ramakrishnan@hk.pwc.com

Hungary

Emöke Szántó-Kapornay

Tel: +36 1461-9295 amoke.szanto-kapornay@hu.pwc.com

Ireland

Ciaran Cunniningham

Tel: +353 1 792-5328 ciaran.j.cunningham@ie.pwc.com

Italy

Pietro Penza

Tel: +39 6 57083-2158 pietro.penza@it.pwc.com

Gabriele Guggiola

Tel: +39 346 507-9317 gabriele.guggiola@it.pwc.com

Latvia

Tereze Labzova

Tel: +371 67094-400 tereze.labzova@lv.pwc.com

Lithuania

Rimvydas Jogela

Tel: +370 5 239-2300 rimvydas.jogela@lt.pwc.com

Luxembourg

Jean-Philippe Maes

Tel: +352 49 4848-2874 jean-philippe.maes@lu.pwc.com

Malta

Fabio Axisa

Tel: +356 2564-7214 fabio.axisa@mt.pwc.com

Netherlands

Abdellah M'barki

Tel: +31 88 792-5566 abdellah.mbarki@nl.pwc.com

Jan Wille

Tel: +31 88 792-7533 jan.wille@nl.pwc.com

Poland

Piotr Bednarski

Tel: +48 22 746-7049 piotr.bednarski@pl.pwc.com

Zdzislaw Suchan

Tel: +48 22 746-4563 zdzislaw.suchan@pl.pwc.com

Portugal

Luís Barbosa

Tel: +351 213 599-151 luis.filipe.barbosa@pt.pwc.com

Russia

Nikola Stamenic

nikola.stamenic@rs.pwc.com

Slovenia

Pawel Peplinski

Tel: +386 1 5860-00 pawel.peplinski@si.pwc.com

Czech Republik

Mike Jennings

Tel: +420 251 152-024 mike.jennings@cz.pwc.com

Spain/Andorra

Alvaro Gonzalez

Tel: +34 915 684-155 alvaro.benzo.gonzalez-coloma@ es.pwc.com

Sweden

André Wallenberg

Tel: +46 10 212-4856 andre.wallenberg@se.pwc.com

Switzerland

Reto Brunner

Tel: +41 58 792-1419 reto.f.brunner@ch.pwc.com

Ukraine

Lyudmyla Pakhucha

Tel: +380 44 3540-404 liusia.pakhuchaya@ua.pwc.com

United Kingdom

Nigel Willis

Tel: +44 20 7212-5920 nigel.willis@pwc.com

Hortense Huez

Tel: +44 20 721-33869 hortense.huez@uk.pwc.com

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft adheres to the PwC-Ethikgrundsätze/PwC Code of Conduct (available in German at www.pwc.de/de/ethikcode) and to the Ten Principles of the UN Global Compact (available in German and English at www.globalcompact.de).

© March 2017 PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. All rights reserved. In this document, "PwC" refers to PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, which is a member firm of PricewaterhouseCoopers International Limited (PwCIL). Each member firm of PwCIL is a separate and independent legal entity.

www.pwc.de