

TW3421x - An Introduction to Credit Risk Management

Introduction

The Basel Accords: Basel III

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Week 1
Lesson 3

2007-2008: The Crisis



Crisi finanziaria

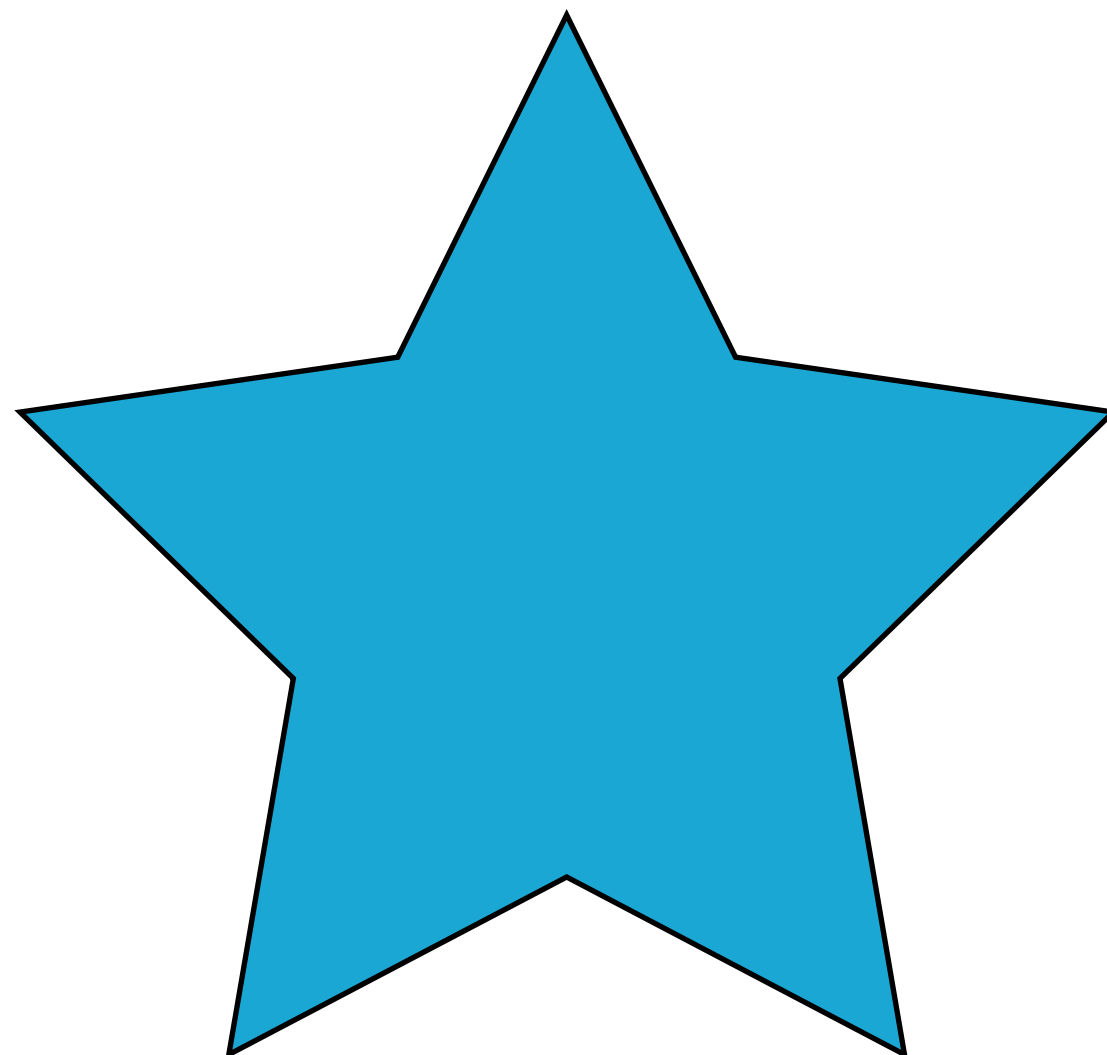
Con l'Unione Europea i cittadini dovevano essere protetti e tenuti indenni da ogni sorta di crisi. (...) (...) Così è stato fino a quando il "crisi finanziario", con epicentro in Europa. (...) nato il crollo di Lehman...



The flaws of Basel II



Insufficient Capital Reserve



The flaws of Basel II

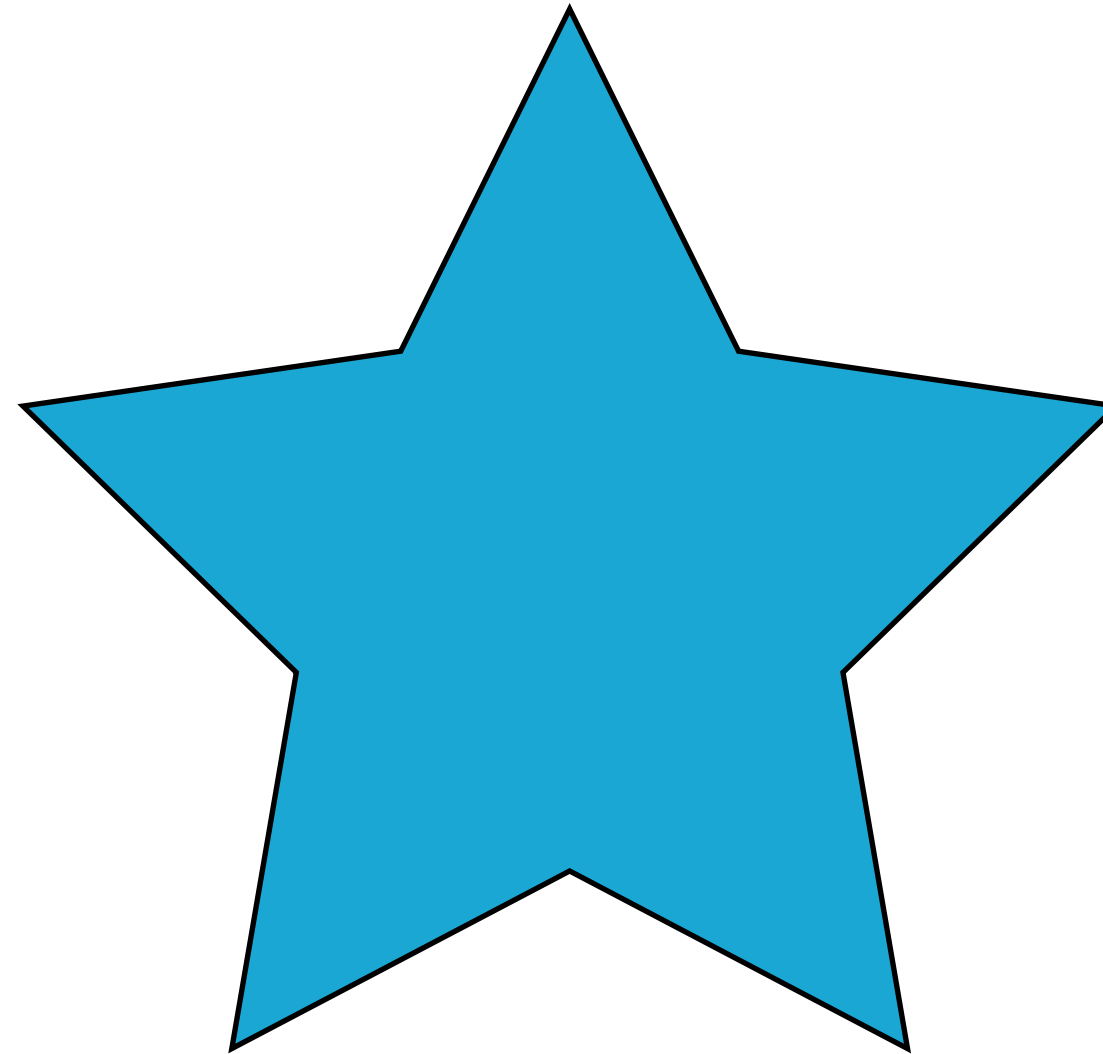
Insufficient Capital Reserve



No uniform definition
of capital

The flaws of Basel II

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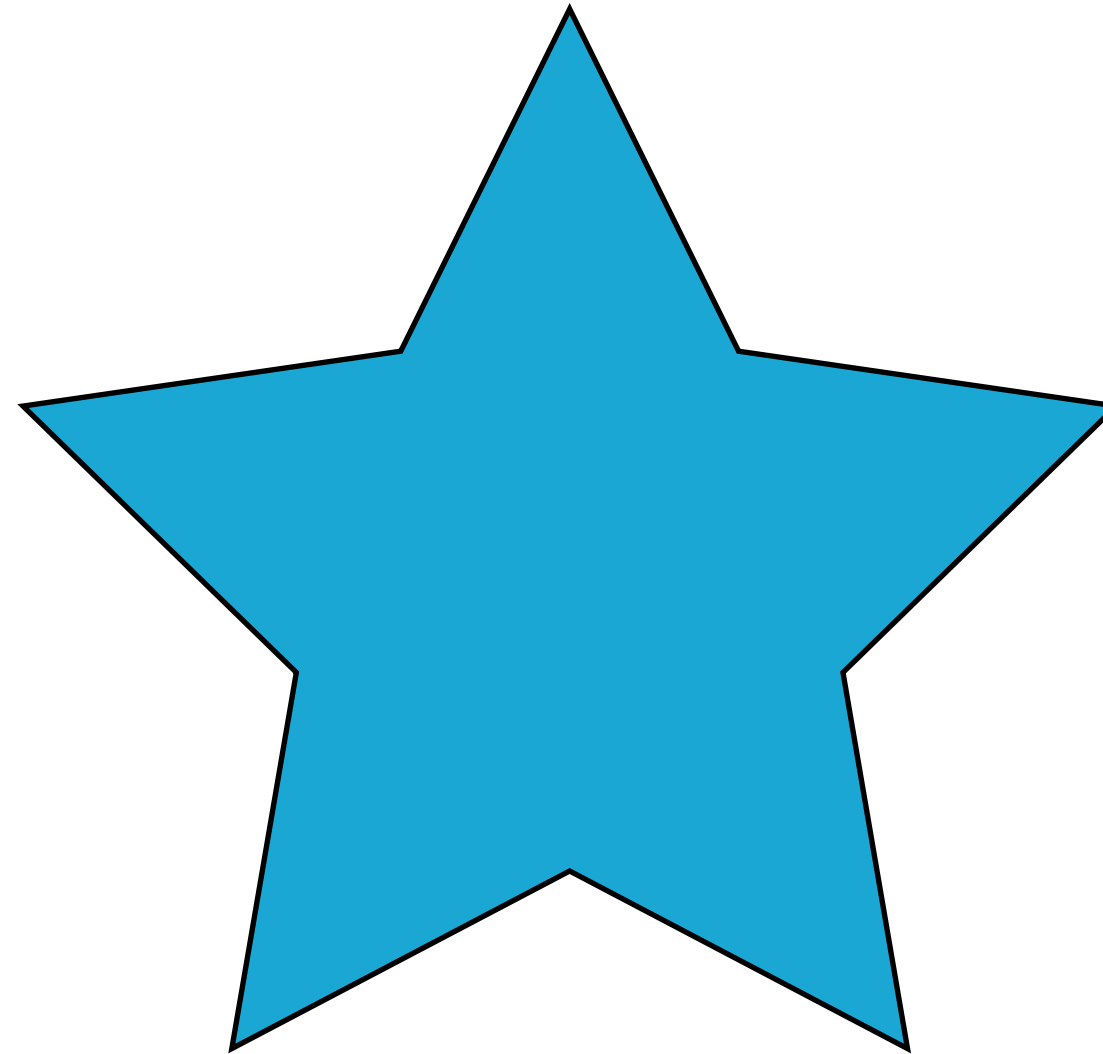


No uniform definition
of capital

Inadequate risk
management approach

The flaws of Basel II

Insufficient Capital Reserve



No uniform definition
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Underestimation of
liquidity risk and
excessive leverage

Inadequate risk
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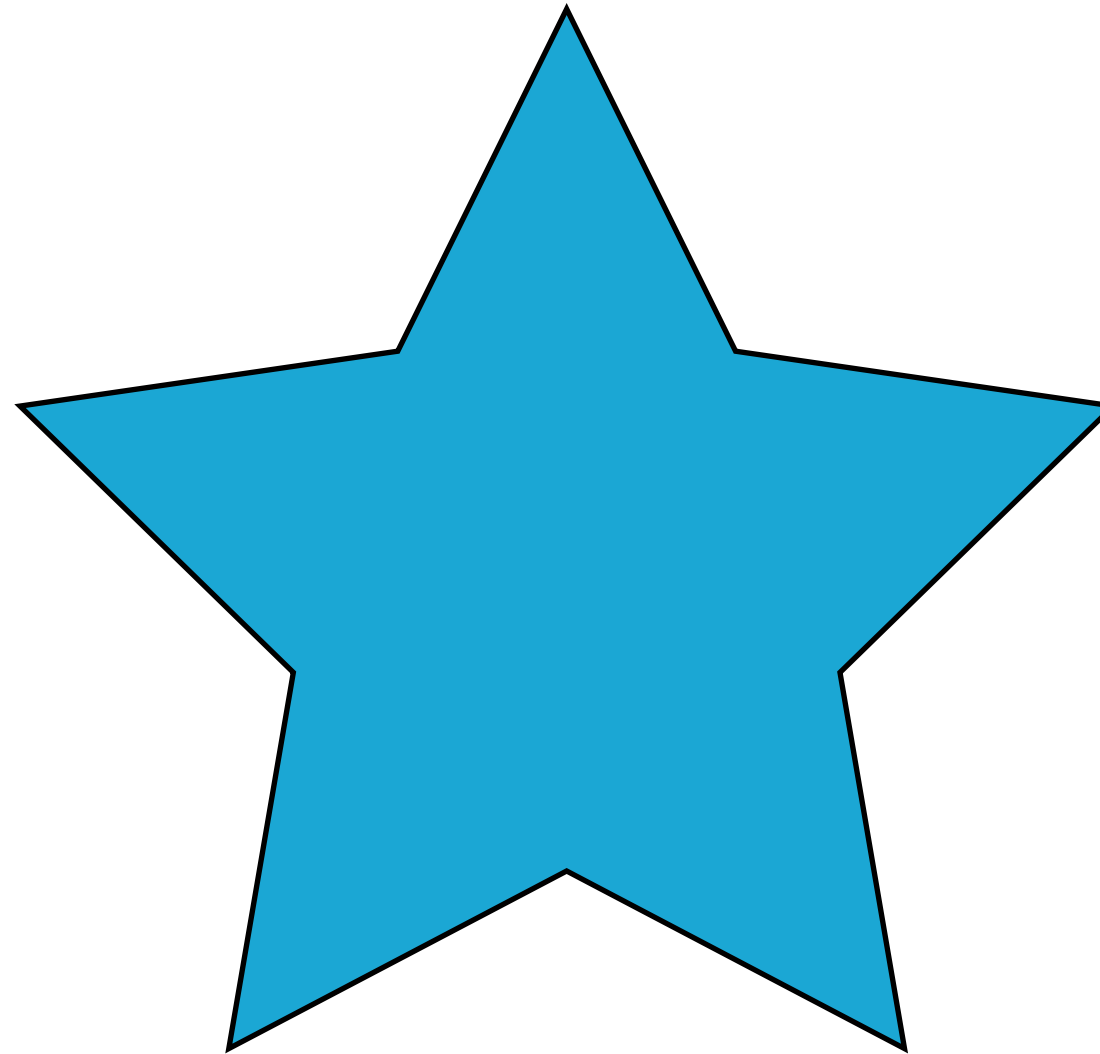
Insufficient Capital Reserve

Pro-cyclicality

No uniform definition
of capital

Underestimation of
liquidity risk and
excessive leverage

Inadequate risk
management approach



Basel III

- ❖ (Basel 2.5 in 2011)
- ❖ First Basel III proposals in 2009.
- ❖ First version in 2011.
- ❖ Many amendments.
- ❖ The implementation is now ongoing.
- ❖ Fully operative in 2018/2019.

The key points

- ❖ Capital definitions and requirements.
- ❖ Capital conservation buffer.
- ❖ Countercyclical buffer.
- ❖ Leverage ratio.
- ❖ Liquidity risk.
- ❖ Counterparty Credit Risk.

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Capital Definitions & Requirements

TIER 1

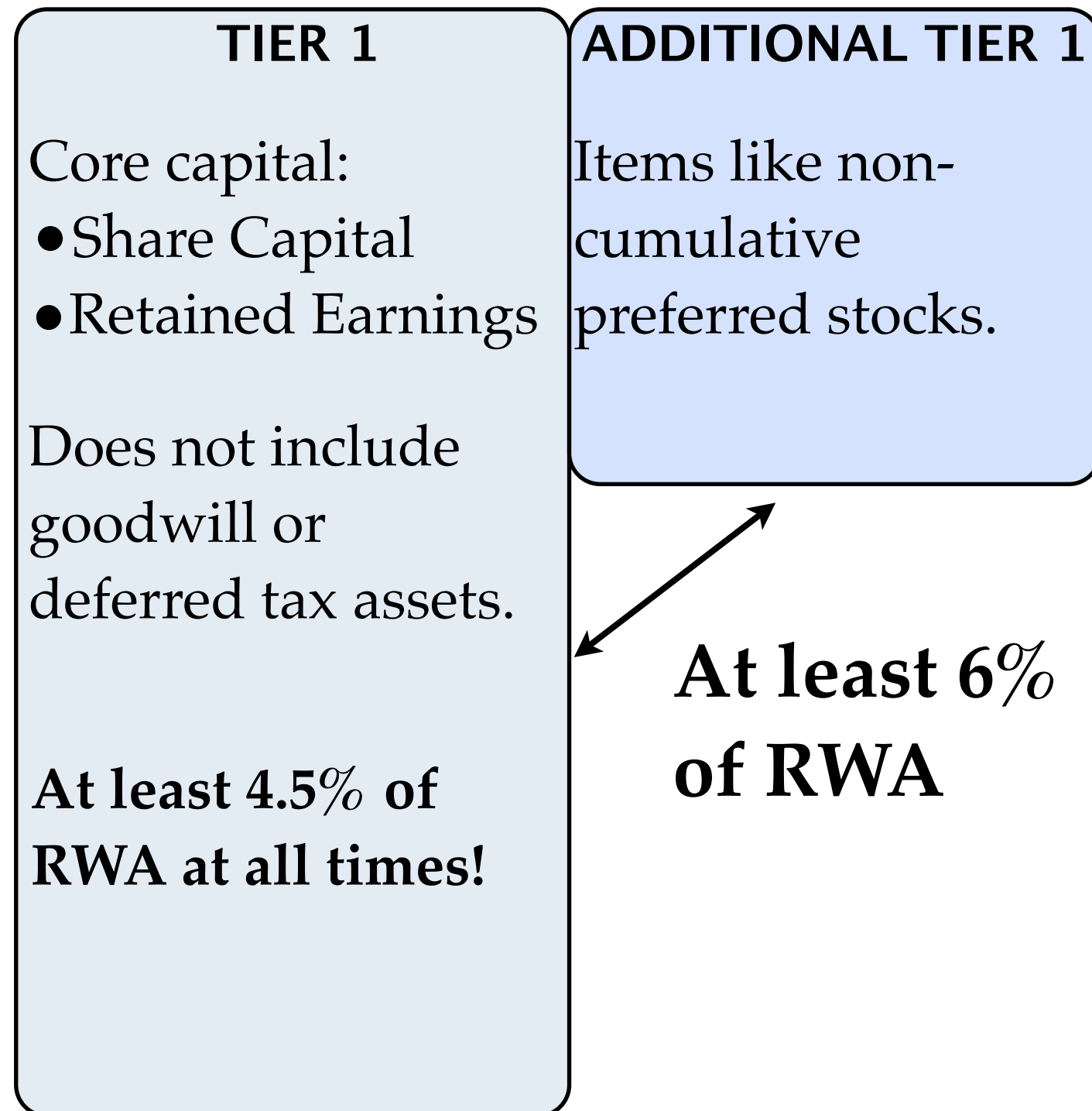
Core capital:

- Share Capital
- Retained Earnings

Does not include goodwill or deferred tax assets.

At least 4.5% of RWA at all times!

Capital Definitions & Requirements



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ADDITIONAL TIER 1

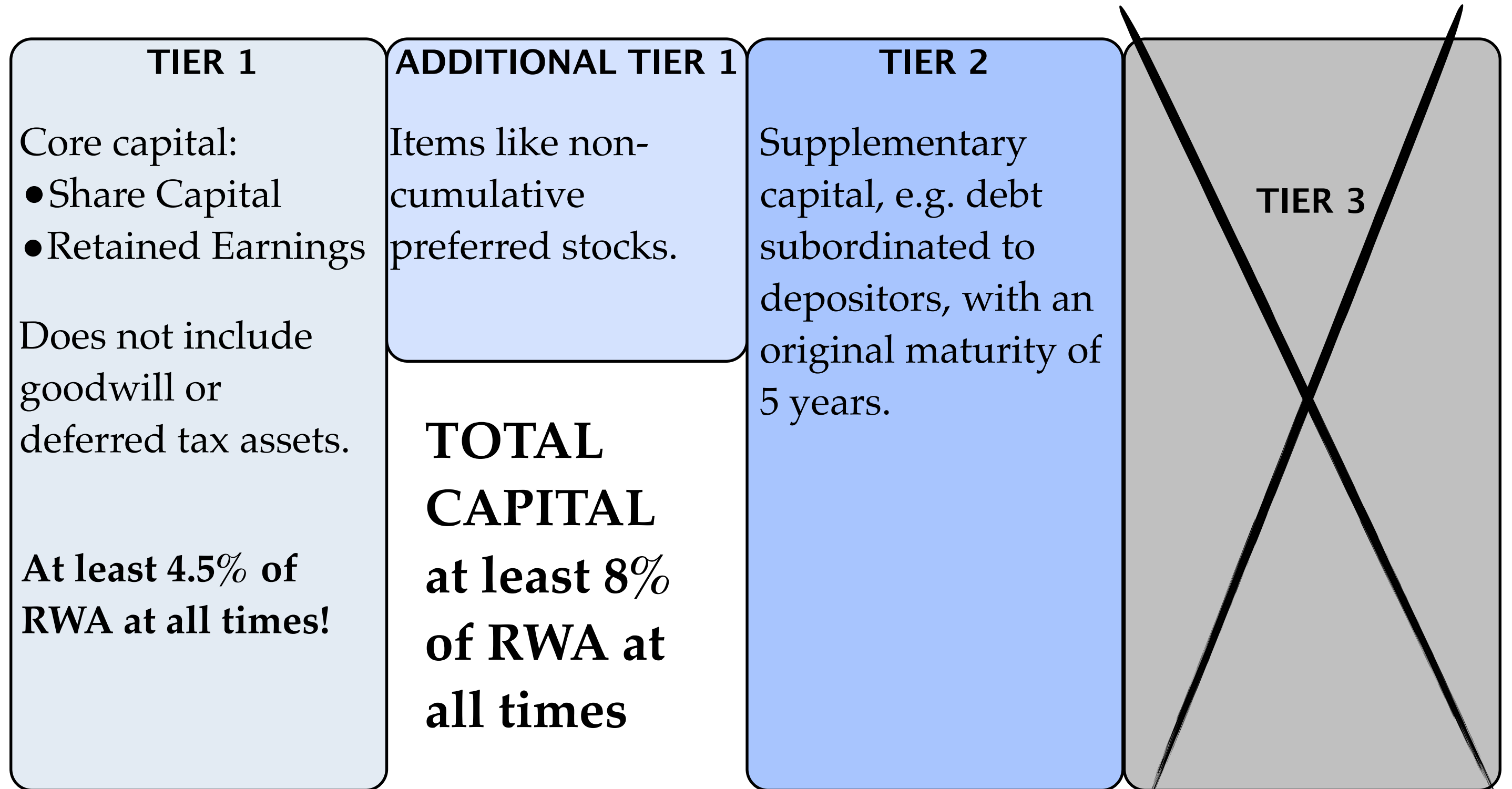
Items like non-cumulative preferred stocks.

TOTAL CAPITAL at least 8% of RWA at all times

TIER 2

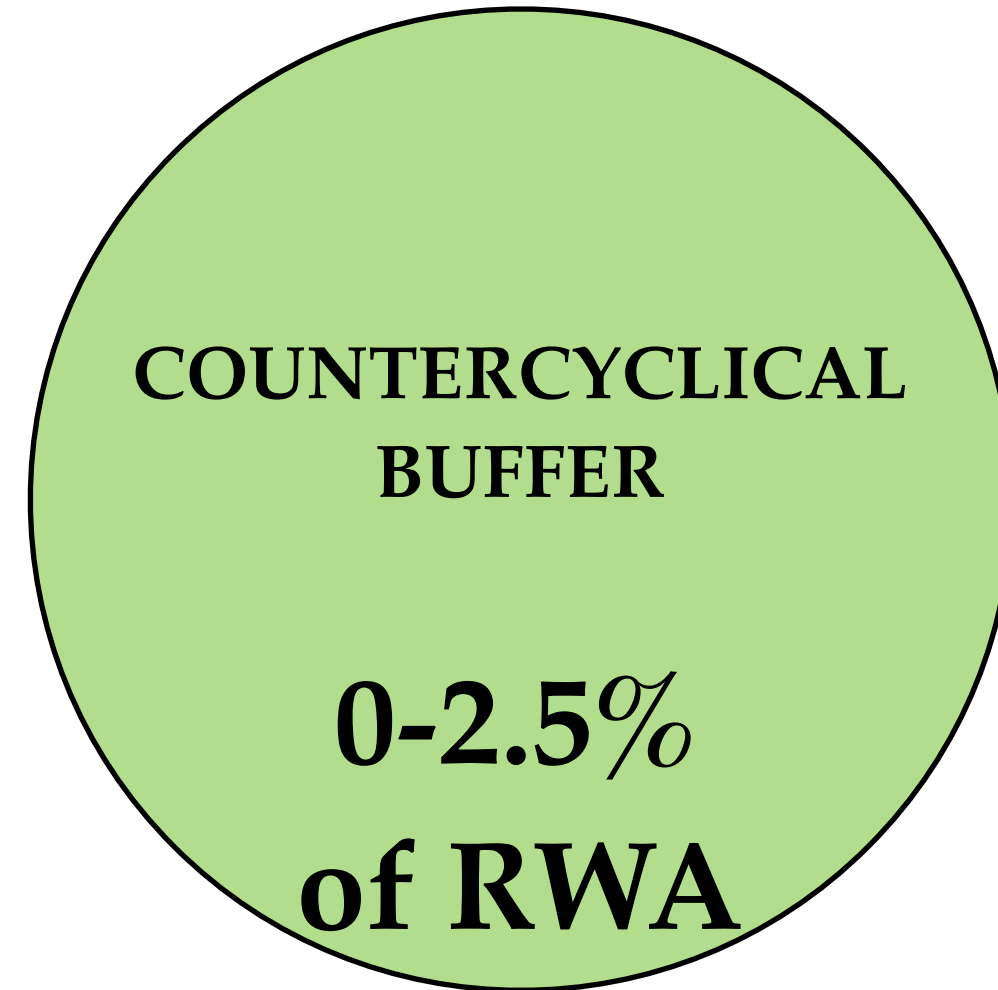
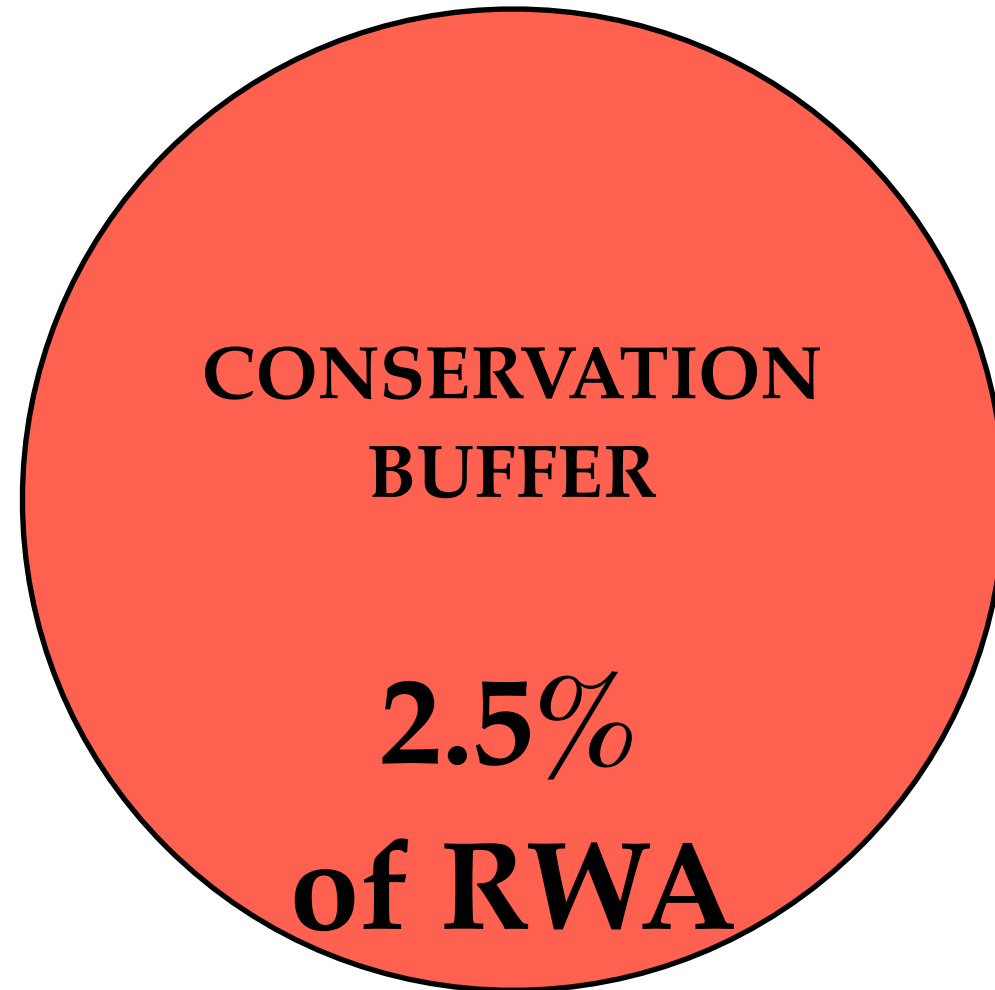
Supplementary capital, e.g. debt subordinated to depositors, with an original maturity of 5 years.

Capital Definitions & Requirements



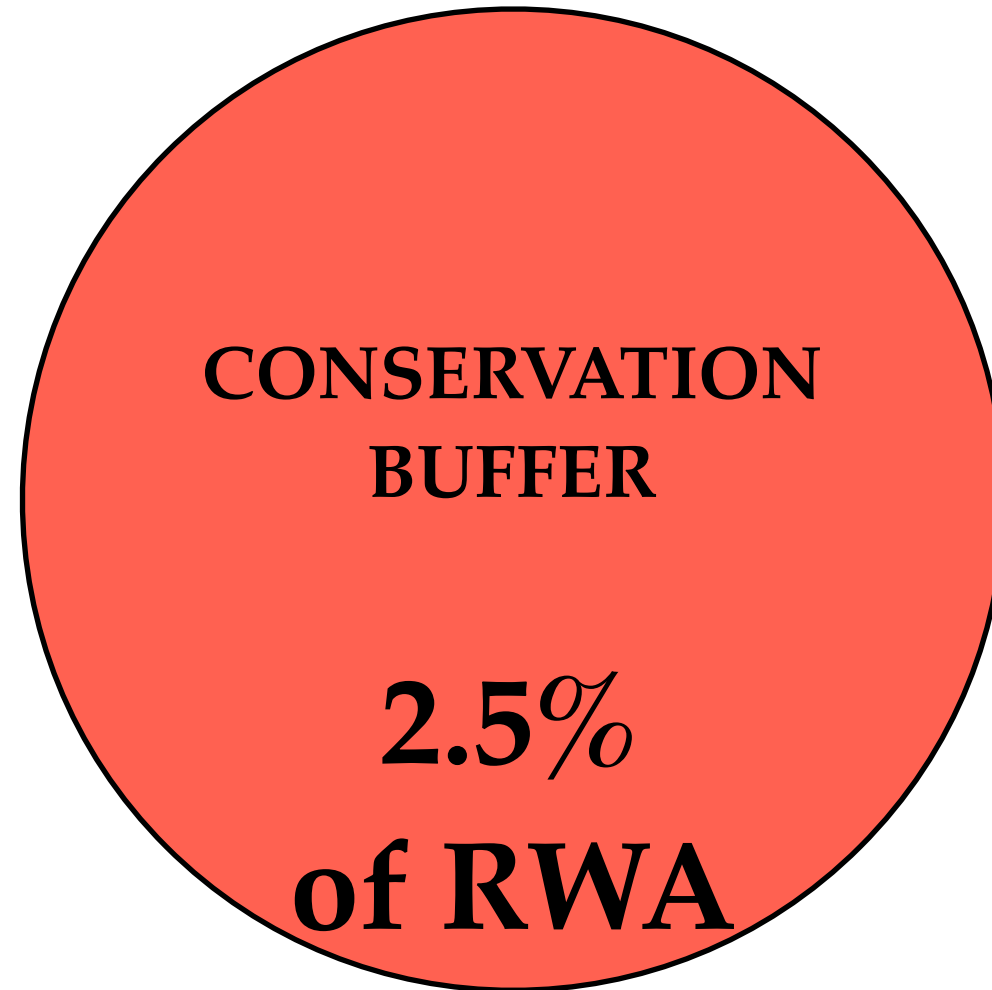
Capital Buffers

- ❖ Basel III asks banks to have additional capital buffers, in order to hedge risk.
- ❖ They must be met with Tier 1 capital.

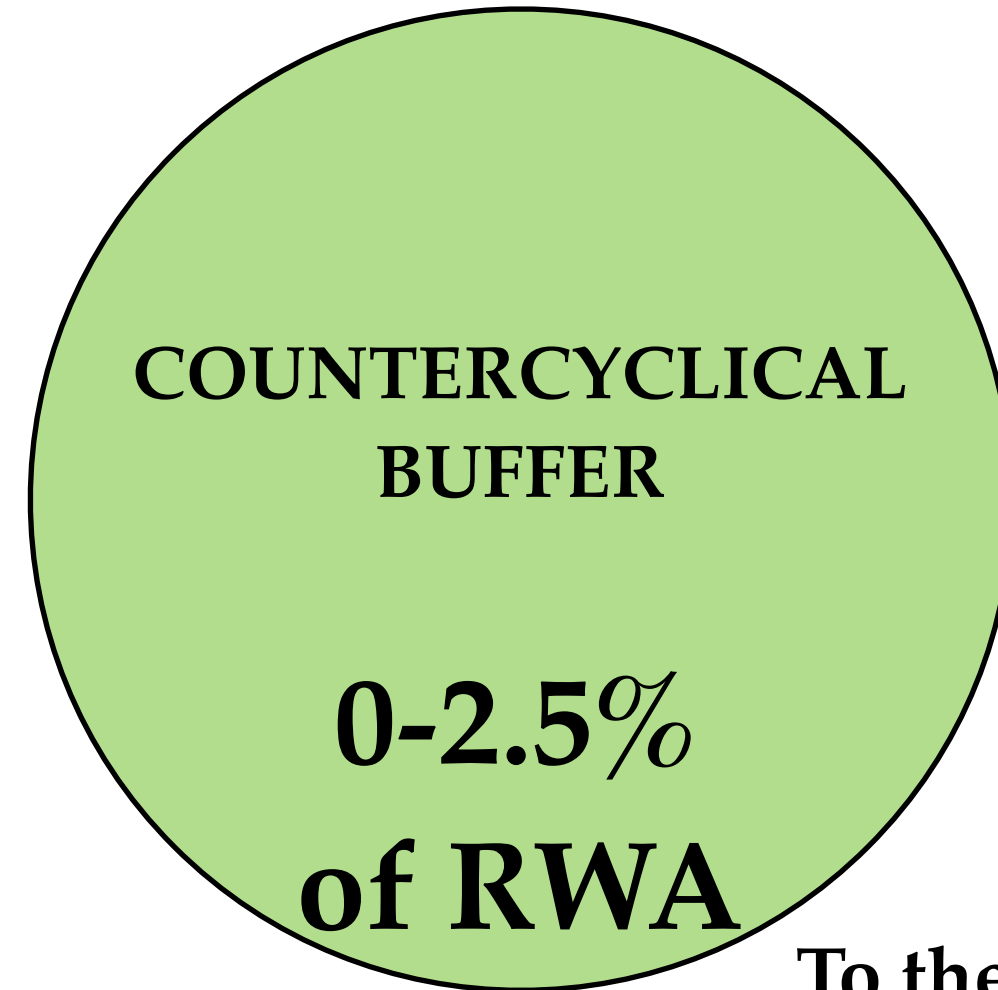


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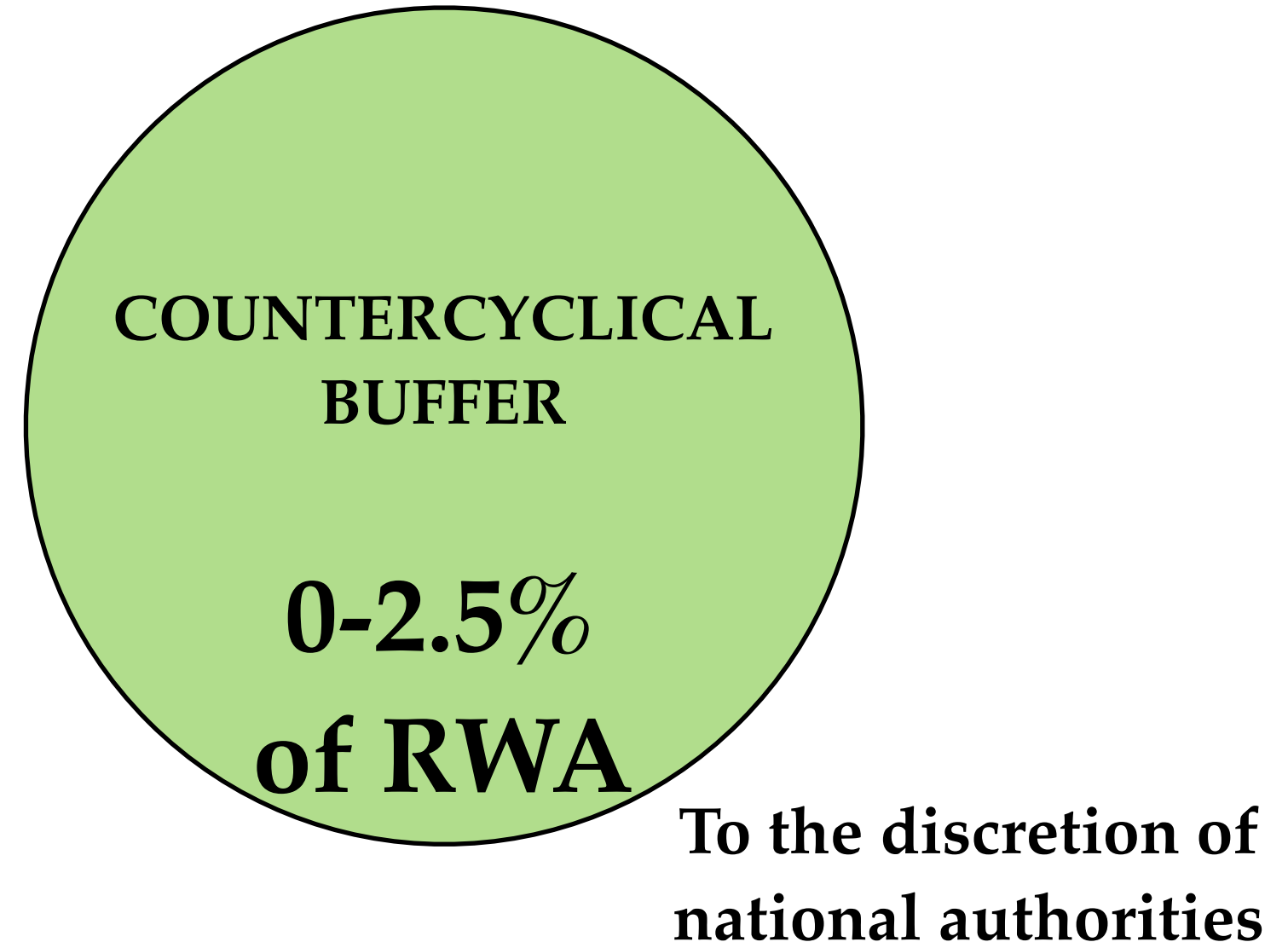
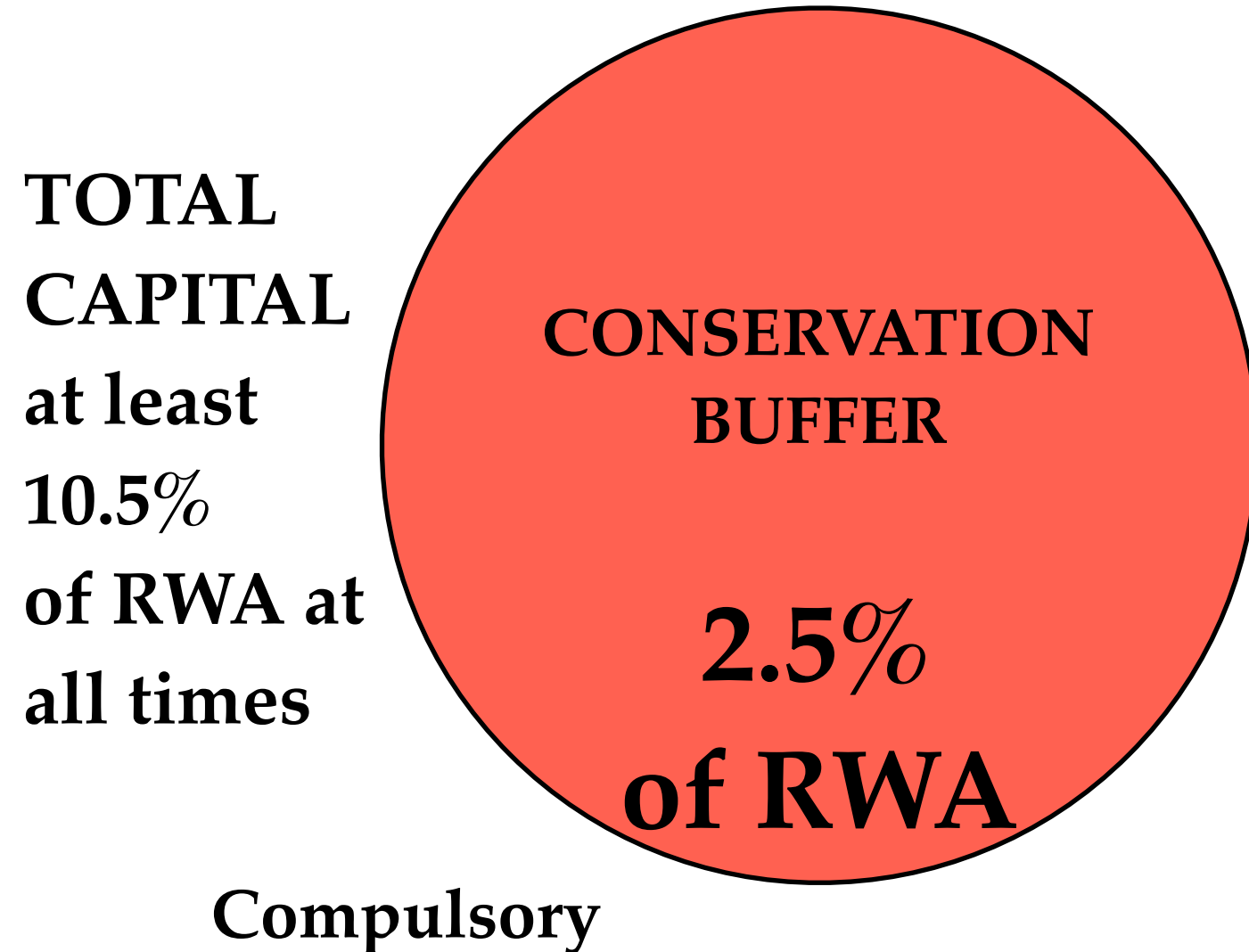
Compulsory



**To the discretion of
national authorities**

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Leverage

- ❖ In addition to the capital requirements based on RWA, banks are supposed to keep a minimum leverage ratio of 3%.
- ❖ The leverage ratio is the **ratio of capital to total exposure**.
- ❖ Regulators may impose stricter regulations.
In the US, for some **Systemically Important Financial Institution** (SIFI) the leverage ratio is at least 6%.

Liquidity Risk

- ❖ Liquidity risk is the risk that manifests itself in situations in which **a party interested in trading an asset cannot actually do it because nobody in the market wants to trade for that asset.**
- ❖ For banks it generally arises because banks have the tendency to finance long-term needs with short-term funding.
- ❖ In good times, this is not generally a problem.
- ❖ In bad times, it can lead a bank to the impossibility of rolling over and financing itself.

- ❖ Under Basel III, for each of its derivatives counterparties, a bank has to compute a quantity known as **credit value adjustment**, or **CVA**.
- ❖ CVA can vary because of **changes in the market variables** influencing the value of the derivatives, or because of **variations in the credit spreads** applicable to the counterparty.
- ❖ If you are interested, this can be the topic of Week 7.

Thank You