Deloitte.

IFRS 17: What does the long "awaited" standard bring?
24 November 2017, Prague

Agenda

Part 1: Introduction to IFRS 17

Part 2: Measurement methodology

- Overview

- General model (BBA)

- Variable Fee Approach (VFA)

- Premium Allocation Approach

Part 3: Other key considerations

- Unit of Account

- New financial statements

- Part 4: Transition

- Part 5: Illustrative Examples

Part 1: Introduction to IFRS 17

Introduction to IFRS 17
Aim and history of the project

Implementation of IFRS 17
Why new standard for insurers?

Comparability

1. **Lack of comparability among insurers**

   Varying practices in applying IFRS 4

   Various approaches even within insurance Groups

2. **Lack of comparability between sectors of economy**

   Revenues include deposits

   Different approach to revenue recognition

Updated assumptions

1. **Outdated biometric assumptions**

   Assumptions are not adjusted to changing market environment

   No lapse assumptions

2. **Outdated Economic assumptions**

   Fixed technical rates, effects of changes not disclosed

Transparency

1. **Lack of important disclosures**

   Not enough information on analysis of change and its sources

2. **Cashflow-based accounting**

   Financial reporting based on cashflows, and not on providing service during insurance period
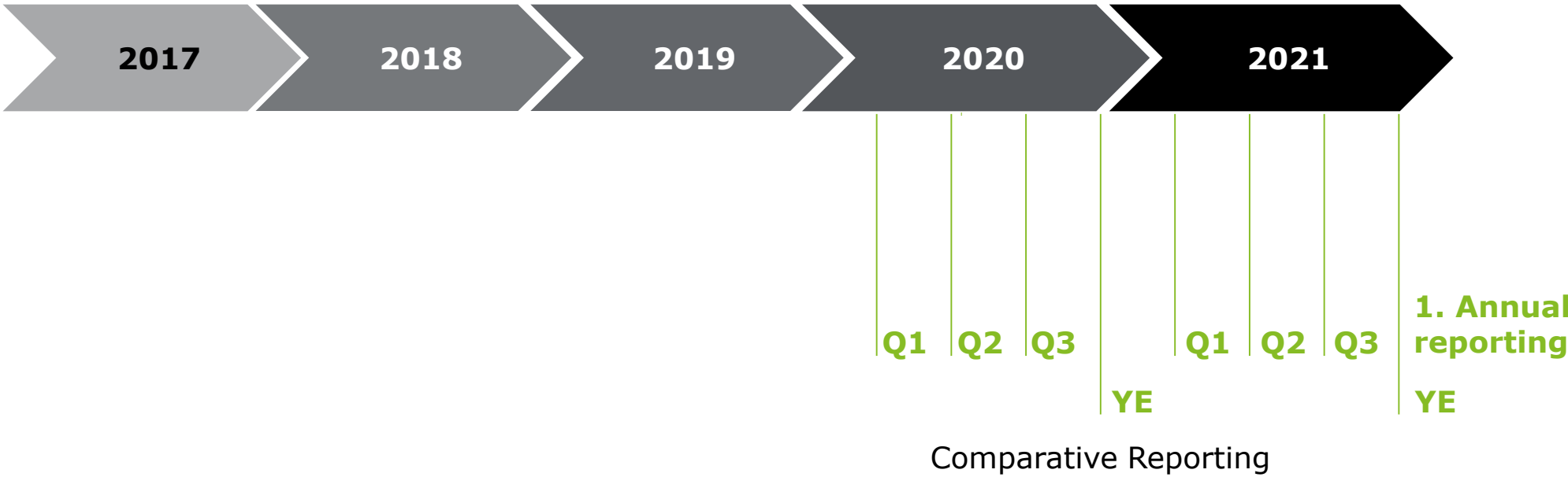
Implementation of IFRS 17
What do we know today?

Publication of the standard
18 May 2017

Implementation of IFRS 9
Possibility of deferral of IFRS9 if insurance activity is prevailing.

Implementation of IFRS 17

| 2017 | 2018 | 2019 | 2020 | 2021 |

Q1 Q2 Q3

Q1 Q2 Q3

YE

1. Annual reporting

YE

Comparative Reporting

Introduction to IFRS 17
What is an insurance contract?

Implementation of IFRS 17
Characteristics of contracts in IFRS 17

Types of contracts

Contracts under IFRS 17

Contract boundaries

Defining what is the scope of cashflows to be included in the valuation

Components of contracts
(*„unbundling"*)

Components of insurance contracts which will have to be excluded from IFRS 17 (i.e. service components or investment components)

Implementation of IFRS 17
Contracts in terms of IFRS 17 (1 / 2)

Insurance contract | **Reinsurance contract (active)** | **Reinsurance contract (passive)** | An insurance contract with a discretionary participation feature

Insurance contract:

*A contract under which one party (**the issuer**) accepts significant **insurance risk** from another party (the **policyholder**) by agreeing to compensate the policyholder if a specified uncertain future event (the **insured event**) adversely affects the **policyholder**."*

Reinsurance contract:

*An **reinsurance contract** issued by one entity (the 'reinsurer') to compensate another entity (the 'cedant') for claims arising from one or more **insurance contracts** that are issued by the cedant (underlying contracts)."*

- ✓ Risk transfer
- ✓ Significant insurance risk
- ✓ Uncertain event
- ✓ Negative impact on the policyholder or the cedant

Implementation of IFRS 17
Contracts in terms of IFRS 17 (2 / 2)

| Insurance contract | Reinsurance contract (active) | Reinsurance contract (passive) | **An insurance contract with a discretionary participation feature** |

"

Insurance contract with a discretionary participation feature:

An insurance contract for which, at inception:

*(a) the contractual terms specify that the **policyholder** participates in a share of a clearly identified pool of **underlying items**;*
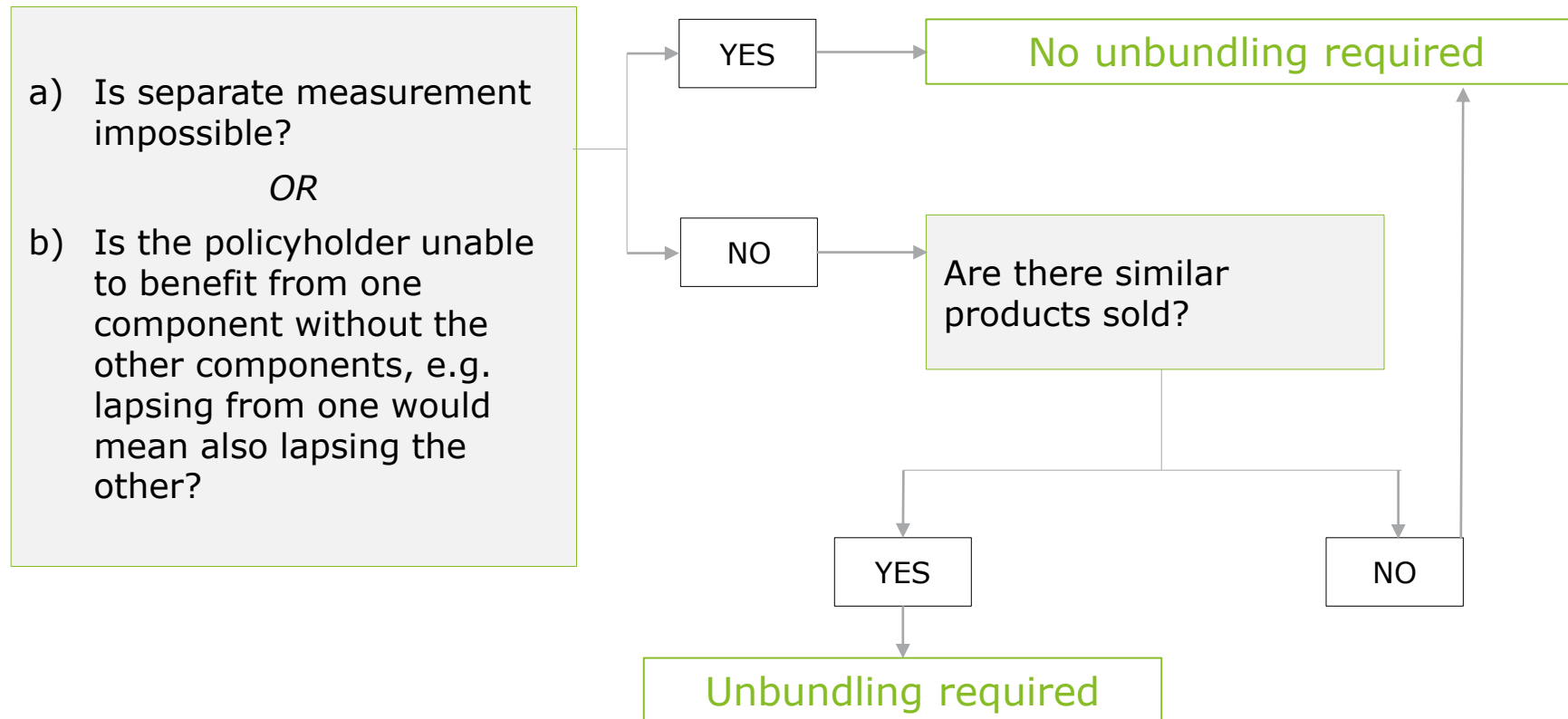
*(b) the entity expects to pay to the **policyholder** an amount equal to a substantial share of the fair value returns on **the underlying items**; and*

*(c) the entity expects a substantial proportion of any change in the amounts to be paid to the **policyholder** to vary with the change in fair value of the **underlying items**.*

- ✓ Additional amounts expected to be a significant portion of the total contractual benefits
- ✓ Possible discretionary element
- ✓ Specified pool of underlying items

Implementation of IFRS 17
Unbundling – investments components

a) Is separate measurement impossible?

OR

b) Is the policyholder unable to benefit from one component without the other components, e.g. lapsing from one would mean also lapsing the other?

YES → No unbundling required

NO → Are there similar products sold?

YES → Unbundling required

NO → No unbundling required

Implementation of IFRS 17
Unbundling – service components

a) Are cash flows and risks of the insurance and service components highly interrelated?

AND

b) Is there a significant service of integrating the insurance and service components?

→ YES → **No unbundling required**

→ NO →

a) Are there similar products sold?

OR

b) Is the policyholder unable to benefit from the service without the other components?

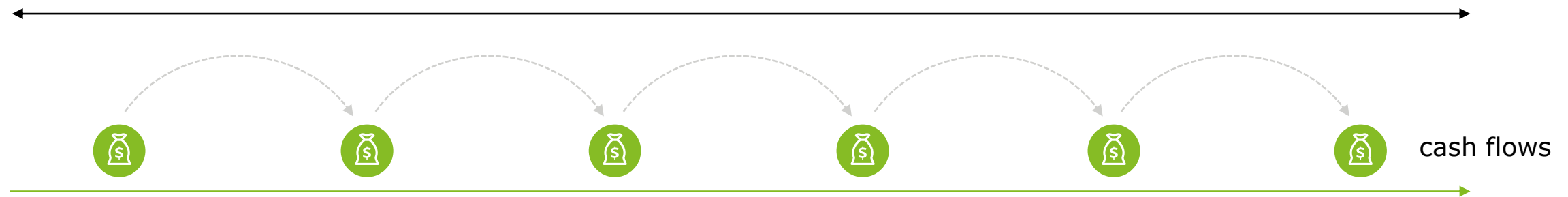→ YES → **Unbundling required**

→ NO →
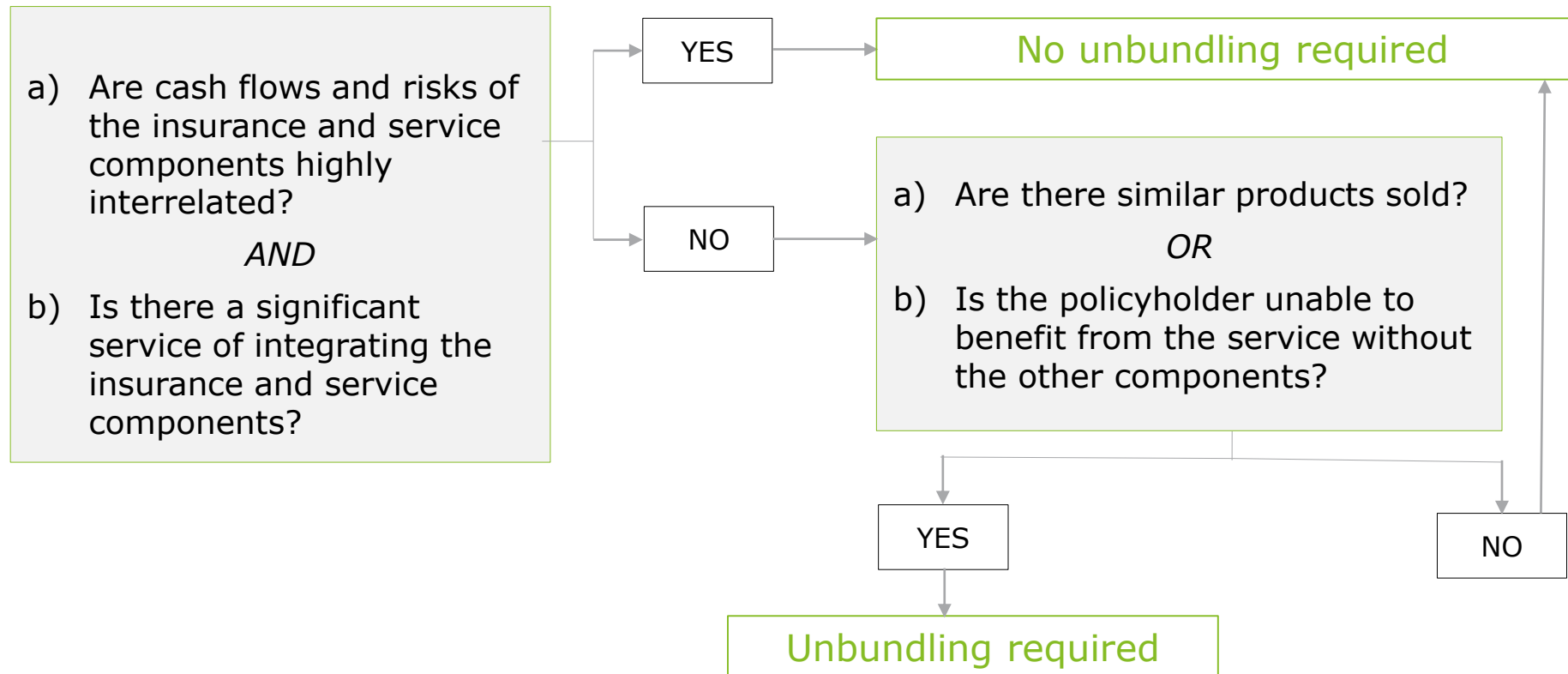
Implementation of IFRS 17
Contract Boundaries

Within the boundary
The policyholder is obliged to pay the premium

cash flows

Substantive obligation
An insurer needs to provide coverage or other services to policyholders

Contract Boundary

(beginning)

The earliest of :
- the beginning of coverage; or
- the date on which first premium is due,
- date when facts and circumstances indicate that a contract can be onerous

1 Insurer has the right or practical ability to reassess the risks **of the particular policyholder** and, as a result, can set a price or level of benefits to fully reflect the risks.

2a Insurer has the right or practical ability to reassess the risks **for the portfolio of insurance contracts** that contain the contract and set a price or level of benefits to fully reflect the risks of that portfolio, and;

2b Pricing for coverage up to the date that the risks are reassessed **does not take into account the risks that relate to future periods**.

Contract Boundary

(end)

Part 2: Measurement methodology

Measurement Methodology
Overview of methods

Basic methods
Overview

BUILDING BLOCK APPROACH (BBA)

Basing method applied to all products both life non-life insurance.

Possible one exemption – PAA and two modifications:

- VFA (obligatory)
- Modified BBA (optional)

VARIABLE FEE APPROACH (VFA)

Applied in life insurance

Permissible only in products satisfying specific rules (products with clearly defined profit sharing and „UL" contracts

Close to „BBA" enables several modifications

PREMIUM ALLOCATION APPROACH (PAA)

Method for short-term contracts, applied mainly in non-life insurance

Permissible only for liabilities with future cover

Produkt	BBA	VFA	PAA
Life insurance	●		
Endowment with no profit sharing	●		
Endowment with profit-sharing	●	●	
Unit-linked	●	●	
Group products	●		●
Non-life insurance – future coverage	●		●
Non-life insurance – past coverage	●		

Basic methods
Diagram

```
                         ┌─────────────────────────┐
                         │   General model „BBA"   │
                         └─────────────────────────┘
            ┌─────────────────────┘              └─────────────────────┐
┌───────────────────────────────┐          ┌───────────────────────────────┐
│  Liabilities – future coverage │          │  Liabilities – past coverage  │
└───────────────────────────────┘          └───────────────────────────────┘
```

Simplified   *Modification*

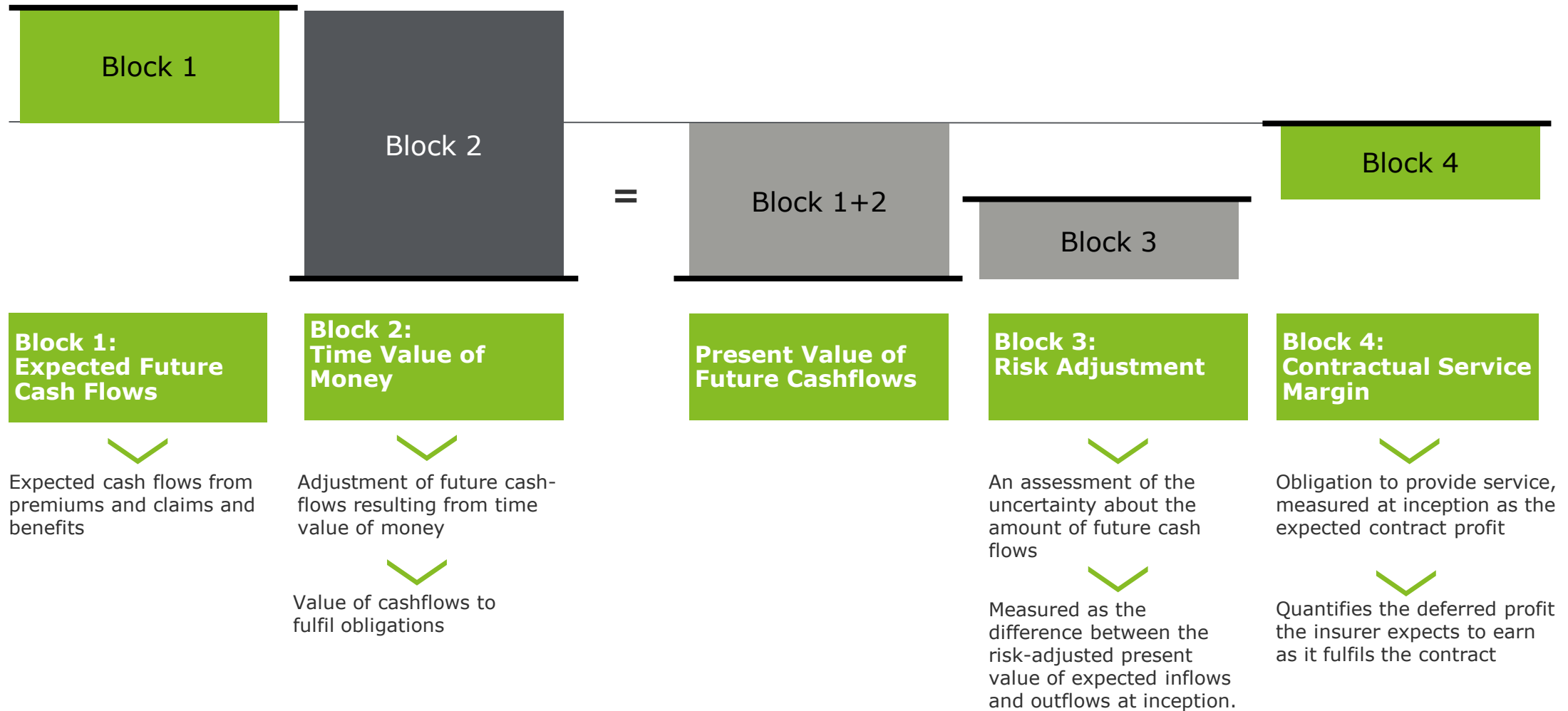| PAA ("Premium Allocation Approach")	VFA ("Variable Fee Approach")	Modified BBA
• *No CSM* • *Mainly for short-term contracts (less than 12 months)*	• *Market assumption changes taken into account in the CSM*	• *Discretionary benefits changes included in the CSM*
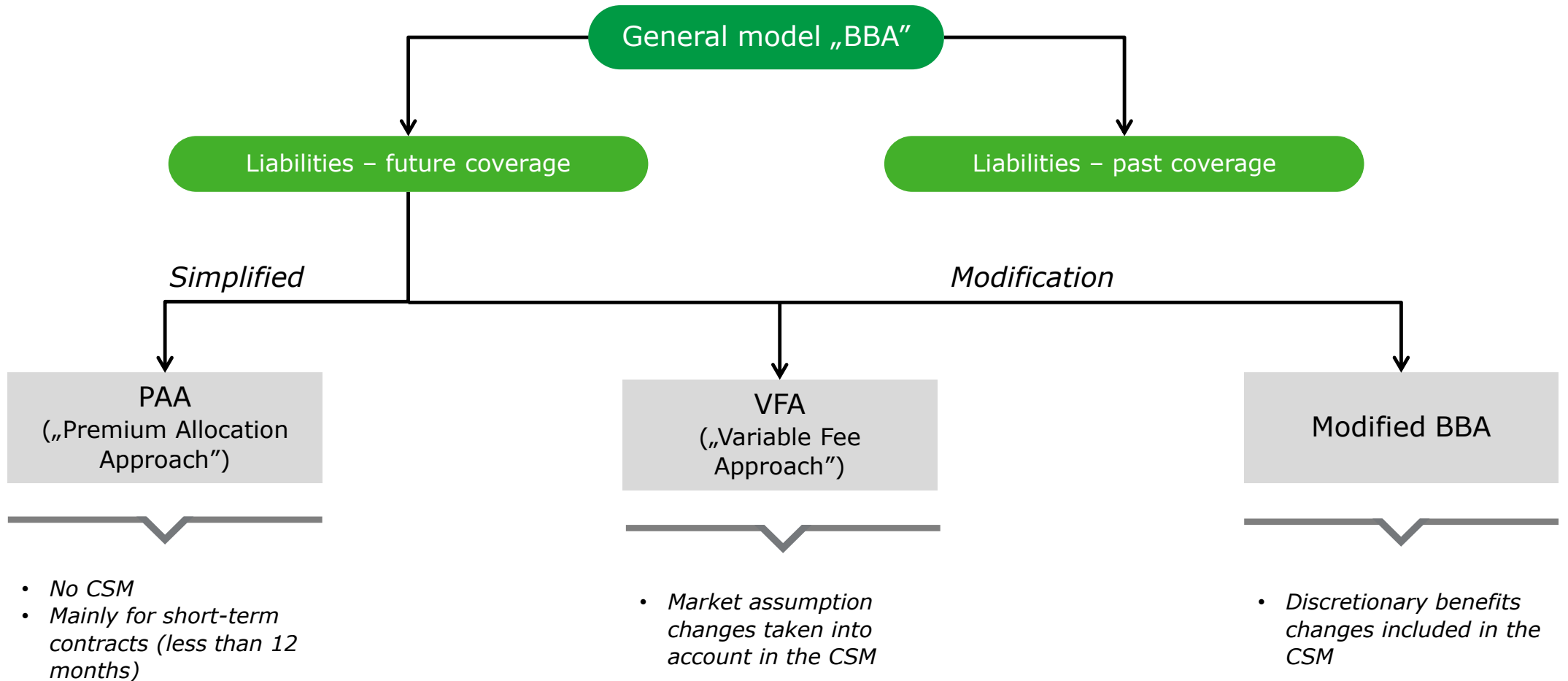
Measurement Methodology
General model

Building Block Approach
Overview measurement at initial recognition

| Block 1 | Block 2 | = | Block 1+2 | Block 3 | Block 4 |

Block 1:
Expected Future Cash Flows

Block 2:
Time Value of Money

Present Value of Future Cashflows

Block 3:
Risk Adjustment

Block 4:
Contractual Service Margin

Expected cash flows from premiums and claims and benefits

Adjustment of future cash-flows resulting from time value of money

An assessment of the uncertainty about the amount of future cash flows

Obligation to provide service, measured at inception as the expected contract profit

Value of cashflows to fulfil obligations

Measured as the difference between the risk-adjusted present value of expected inflows and outflows at inception.

Quantifies the deferred profit the insurer expects to earn as it fulfils the contract

Building Block Approach
Block 1: Future cash flows
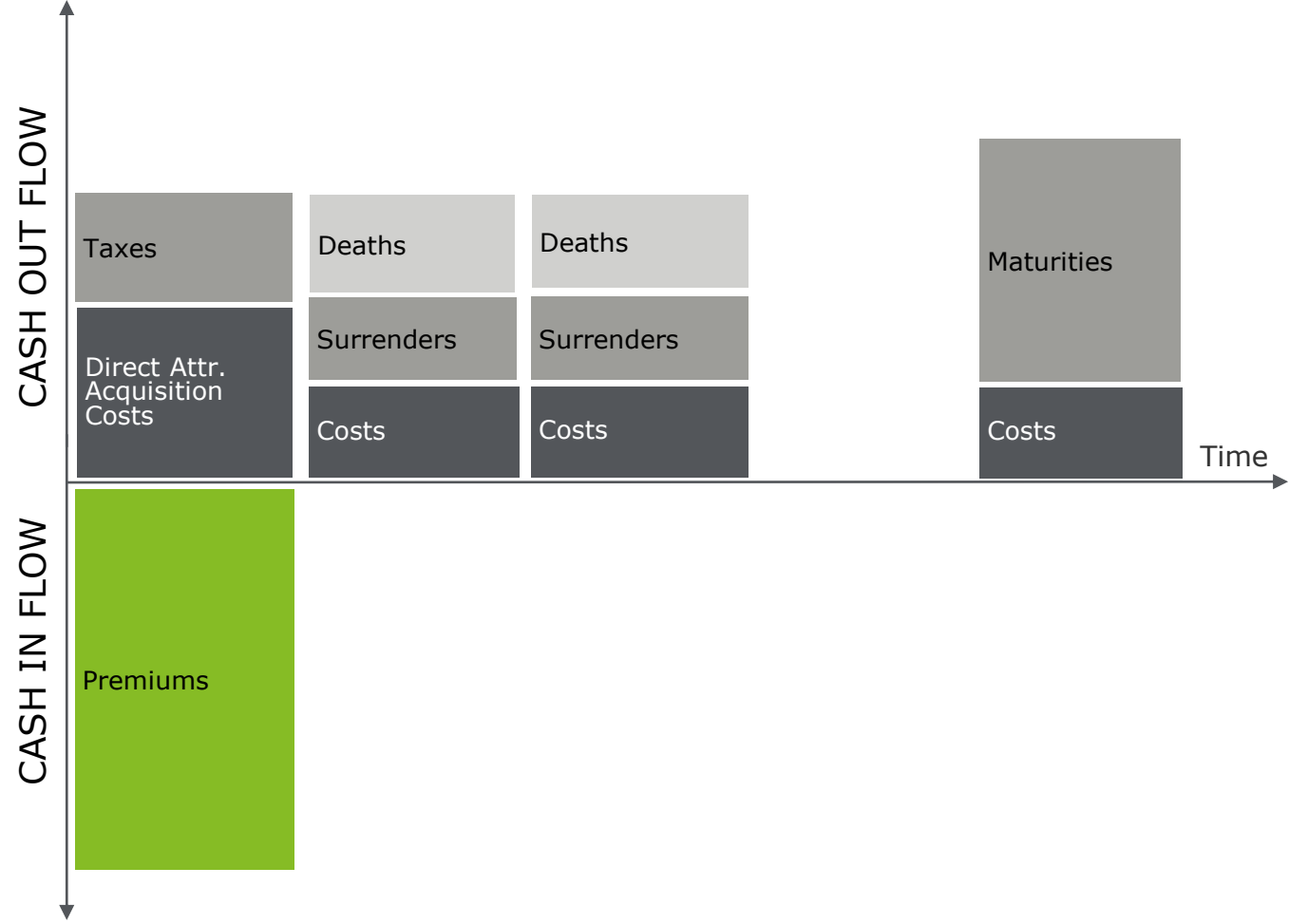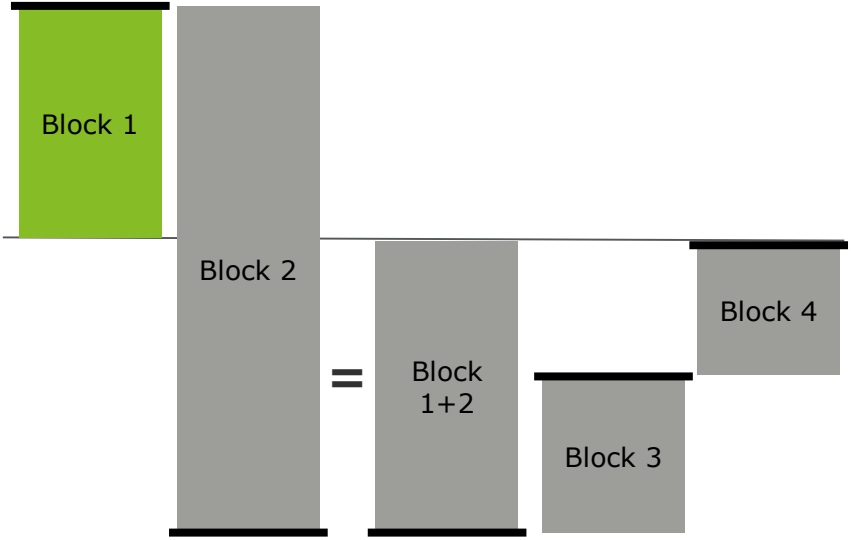
Building Block Approach
Block 2: Time value of money

Block 1

Block 2 = Block 1+2

Block 3

Block 4
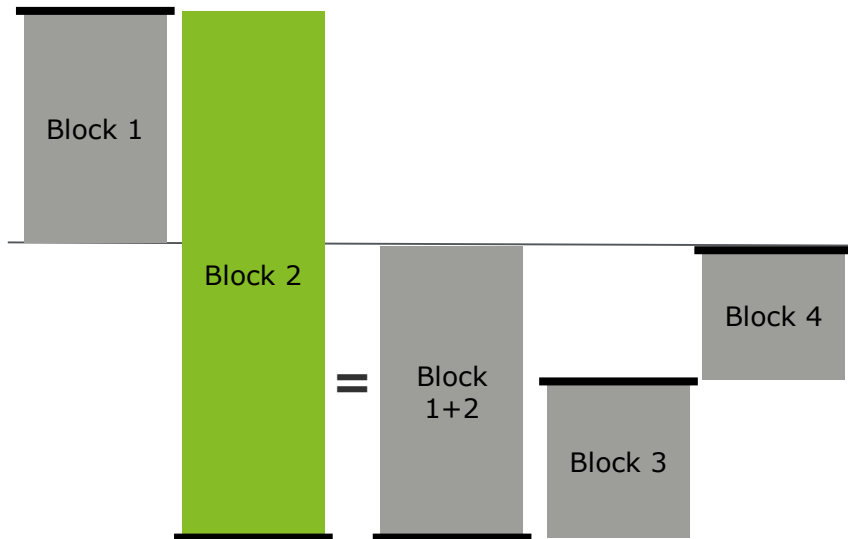
„Top-down" ⬇

„Bottom-up" ⬆

Reference portfolio rate

- (−)
  - Duration mismatches
  - Credit risk (external and own)
  - The other factors that are not relevant to the insurance liability
  - No need to include other liquidity adjustments
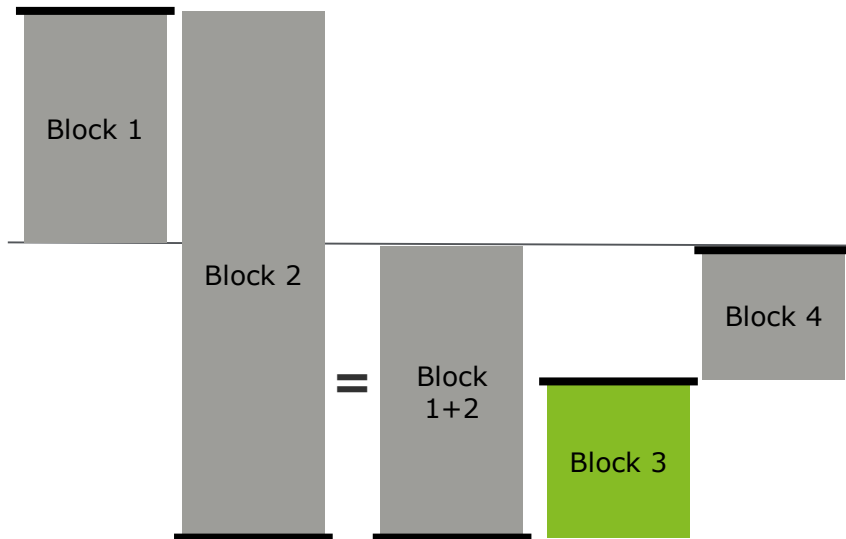
Insurance liability – Discount Rate

(+) Liquidity premium

Risk free rate

Both approaches should lead to the same outcome

Building Block Approach
Block 3: Risk adjustment

Block 1

Block 2

=

Block 1+2

Block 3

Block 4

Measure of uncertainty

Principle-based approach

Specific for each insurer
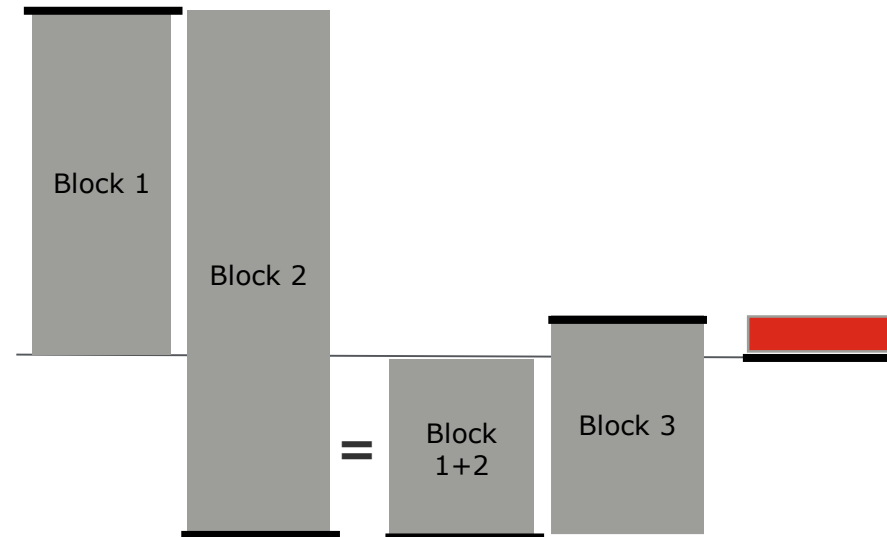
Diversified

Comprehensive

Building Block Approach
Block 4: CSM
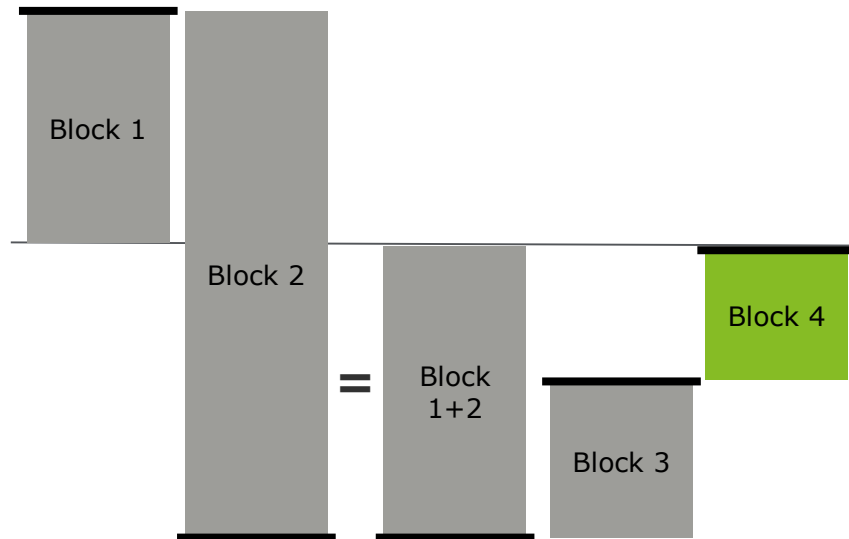
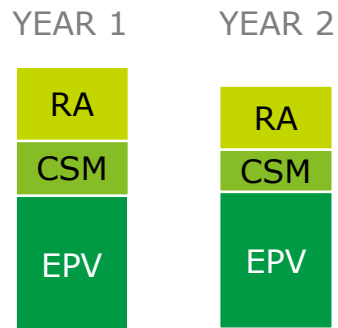Block 1 + Block 2 + Block 3 < 0
Recognise Contractual Service Margin

Block 1 + Block 2 + Block 3 > 0
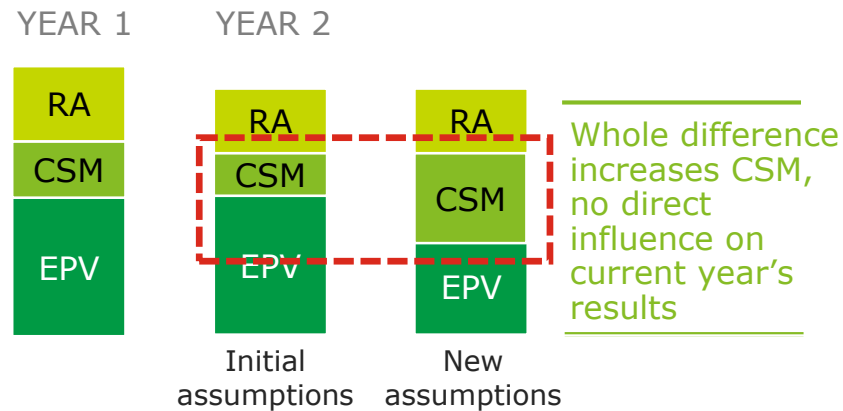Recognise Day One Loss (Onerous Contract)

General Model of IFRS 17 liabilities measurement
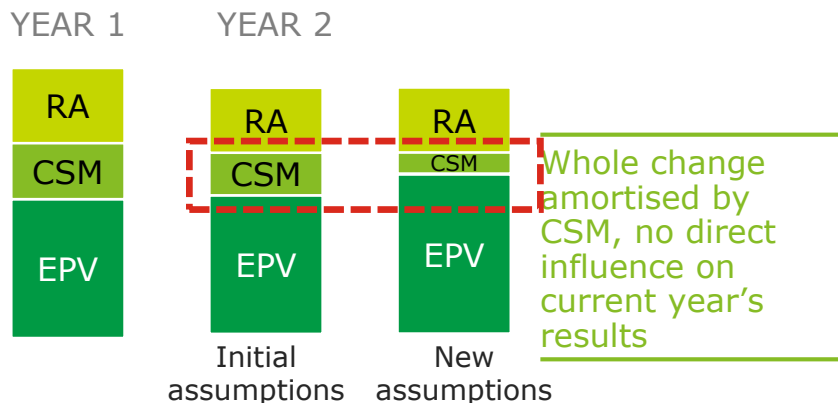## Building Block Approach: assumption changes may affect profit

Example 1: No assumption changes

YEAR 1   YEAR 2

Example 2: Favourable assumption change as of 2nd year

YEAR 1   YEAR 2

Initial assumptions   New assumptions

Whole difference increases CSM, no direct influence on current year's results

Example 3a: Unfavourable assumption change as of 2nd year

YEAR 1   YEAR 2

Initial assumptions   New assumptions

Whole change amortised by CSM, no direct influence on current year's results

Example 3b: Unfavourable assumption change as of 2nd year

YEAR 1   YEAR 2

Initial assumptions   New assumptions

Part of change amortised by CSM, the remaining part directly influences results
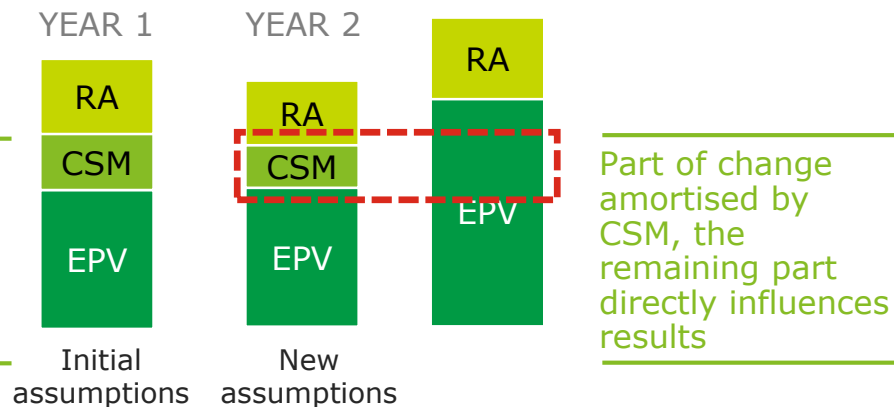
Change of EPV and RA

Events of the current period

Related profit or loss recognised immediately in **P&L**

Non-economic assumptions relating to future periods

Favourable:

Increase **CSM**

If Loss Component exists (CSM=0), it has to be reverted in **P&L** before CSM is re-established

Unfavourable:

Decrease **CSM** until exhaustion (CSM shall not be negative)

Once CSM is exhausted, loss is recognised in **P&L**

Building Block Approach
Summary of changes in estimates

	CSM	OCI	P&L
Lapse/Surrender	●		
Mortality	●		
Morbidity and recovery	●		
Directly attributable maintenance and acquisition expenses	●		
Expense inflation	●		
Risk Adjustment	●		●
Discount rate		●	●
Expected credit losses on RI assets			●
Salvage and subrogation			●
IBNR			●
Other assumptions in respect of past coverage			●

Measurement Methodology
Variable Fee Approach

Variable Fee Approach
Contract classification
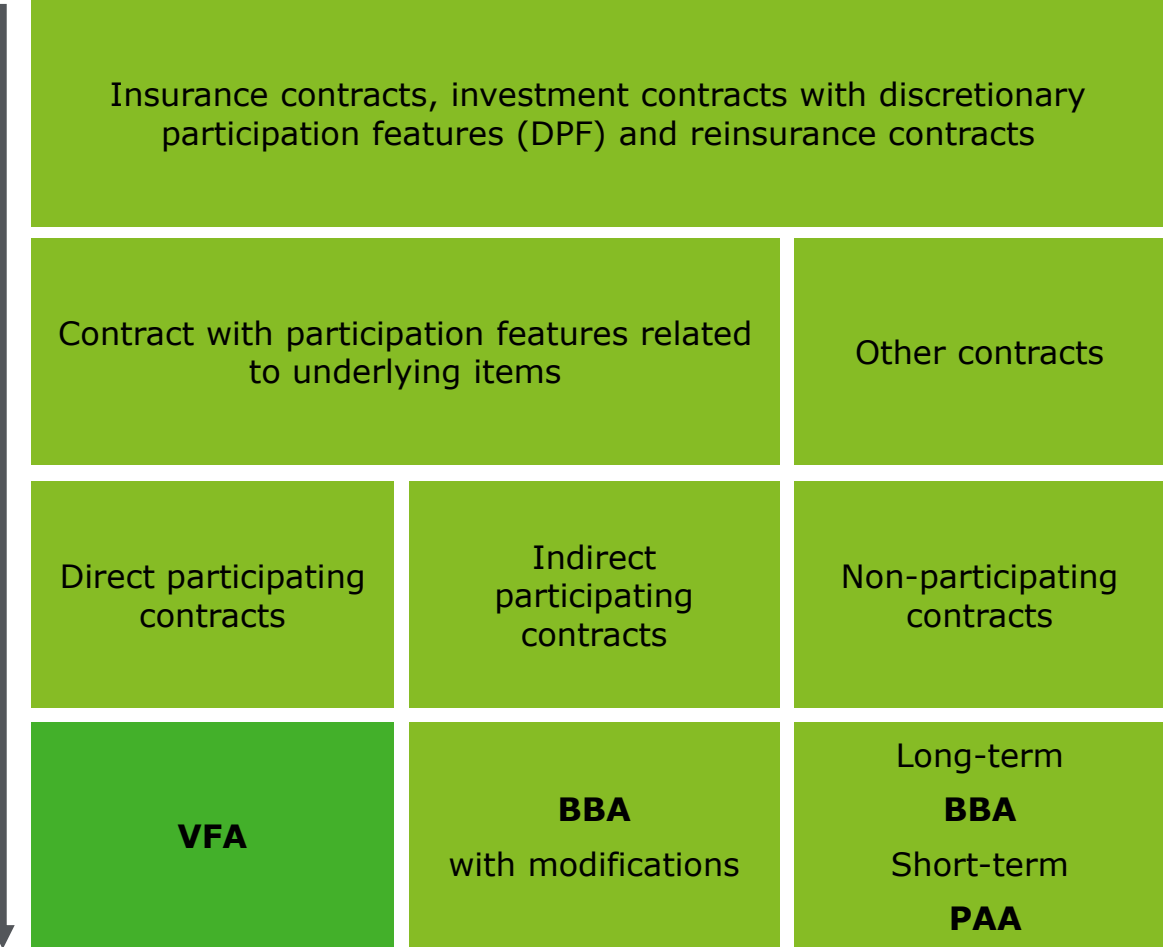
Insurance contracts, investment contracts with discretionary participation features (DPF) and reinsurance contracts		
Contract with participation features related to underlying items		Other contracts
Direct participating contracts	Indirect participating contracts	Non-participating contracts
VFA	**BBA** with modifications	Long-term **BBA** Short-term **PAA**

Direct participating

Contract with participation features related to underlying items, for which the specific participation features prescribed by IFRS 17 are met

Indirect participating

Contract with participation features related to underlying items, for which the specific participation features prescribed by IFRS 17 are not met

Non-participating

Contract where the fulfillment cash-flows do not depend on the underlying items.

Variable Fee Approach („VFA")
Conditions for eligibility

Variable Fee Approach ("VFA") is applied for contracts with direct participation feature.

Above contracts meet the following conditions:

i. **the contractual terms** specify that the policyholder participates in **a share of a clearly identified pool of underlying items**

ii. the entity expects to pay to the policyholder an amount equal to **a substantial share of the fair value returns** on the underlying items; and

> Eg.
> 1. Unit Linked product: 100% of fund return in
> 2. 90% policyholder fund's surplus

iii. the entity expects a substantial proportion of any change in the amounts to be paid to the policyholder to **vary with the change in fair value of the underlying items.**

> Eg.
> 1. Unit Linked product: Death benefit = Max(Fund Value, Sum Assured)
> 2. Reversionary Bonus, Terminal Bonus

VFA is not applicable to reinsurance contracts.

Examples: endowment insurance with profit sharing based on yield rate, endowment insurance with profit sharing based on biometric variables, unit-linked

Variable Fee Approach
Different underlying model

In variable fee approach, the returns to the entity arising from participating contract is viewed as part of the compensation that the entity charges the policyholder for service provided by the insurance contract, rather than as a share of returns from a standalone investment.

Building Block Approach

x%   PH

Assets
Surplus
Liability

100 - x%   SH

Changes will go to P&L or OCI

Variable Fee Approach

100%   PH

Assets
Surplus
Liability

A variable fee that entity charges policyholder   SH

Changes will go to CSM
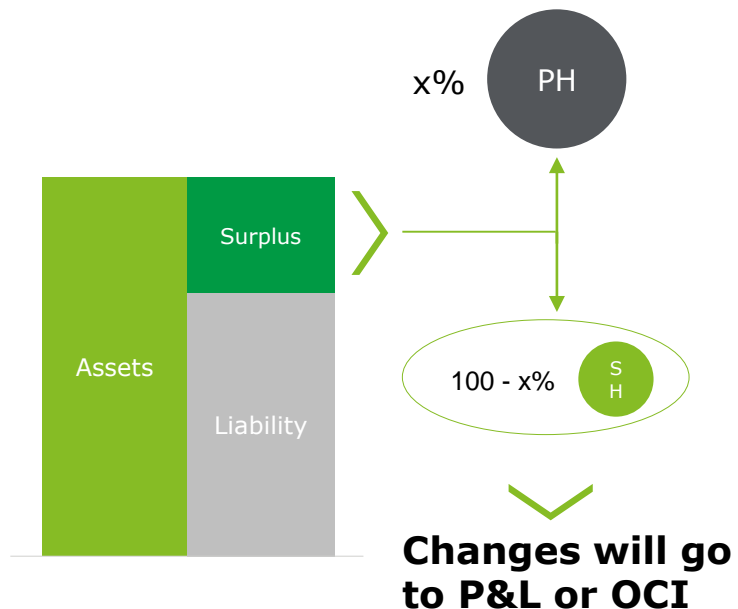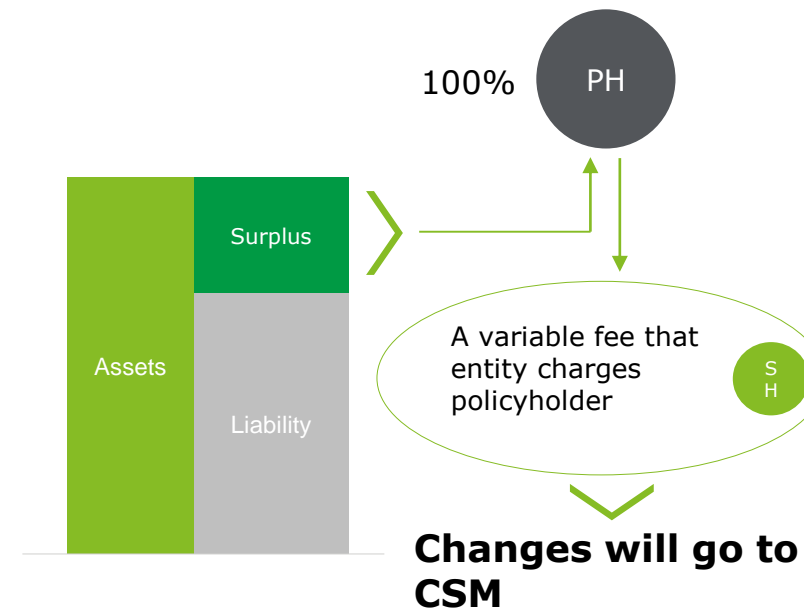
Acronym Key

PH	Policyholder	SH	Insurer

Measurement Methodology
Premium Allocation Approach

Premium Allocation Approach
Decision tree

Insurance Contract under IFRS 17

The coverage period of each contract in the group is one year or less? — **YES** → **PAA permissible**

NO

The entity expect low variability (before a claim is incurred), in the fulfilment cash flows that are required to fulfil the contract? — **NO** → **PAA may not be applied**

YES

Would applying PAA approach not differ materially from the one that would be produced applying BBA approach? — **NO** → **PAA may not be applied**

YES

PAA permissible

Premium Allocation Approach
General rules

CSM is unlocked and floats up/down, but can never be negative

PAA is systematically decreased with risk earning and recognition of specific elements of premium

Liabilities from claims already incurred are recognised using BBA

Risk adjustment is recognized over combined coverage and claims handling period.

Approach based on using UPR decreases costs required to adjust to IFRS 17

PAA **BBA**

UPR

Acquisition costs

CSM

RA

Discount

Future CFs

Day 0

PAA ≈ **BBA**

UPR

AC

RA

Discount

Future CFs

CSM

RA

Discount

FCF

RA

Discount

Future CFs

Liability for remaining coverage

Liability for incurred claims

Coverage Period

PAA **BBA**

RA

Discount

Future CFs

RA

Discount

Future CFs

End of Coverage

Acronym Key

AC	Acquisition costs
FCFs	Future cash flows
CSM	Contractual service margin
RA	Risk Adjustment
UPR	Unearned premium reserve

As BBA approach has to be applied to incurred claims, using both approaches might ultimately still be expensive for a company. Therefore the decision to apply PPA has to be analysed in detail.

If the contract is onerous („onerous contract"), the UPR and acquisition costs estimate will have to be increased by the amount required to fulfil the obligation. This estimate will have to be done based on BBA.

General Model of IFRS 17 liabilities measurement
Alternative valuation models – example of products

Premium Allocation Approach

- Non-life insurance *(coverage period)*
- Short-term life and certain group contracts

Building Block Approach

- Non-life insurance *(incurred claims)*
- Long-term life protection contracts
- Long-term endowments with no profit-sharing
- Annuities with no profit-sharing

Variable Fee Approach

- Unit-linked contracts
- Long-term endowments with specific profit-sharing regulations

Part 3: Other considerations

Other considerations
Unit of Account

Aggregation levels for calculations in IFRS 17
Unit of account

Expected future cashflows

Could be measured at the level of **portfolio of contracts**

CSM the point of contract recognition

It is permissible to group contracts of similar profitability, which will respond in similar ways to key drivers of risk

Main goal:
Aggregation level should not impact the level of present value of expected future cashflows measured at the individual policy level

...but...

some calculations on individual level may be impracticable or impossible

?

Risk adjustment

Measured at the level enabling to include all **expected diversification effects**
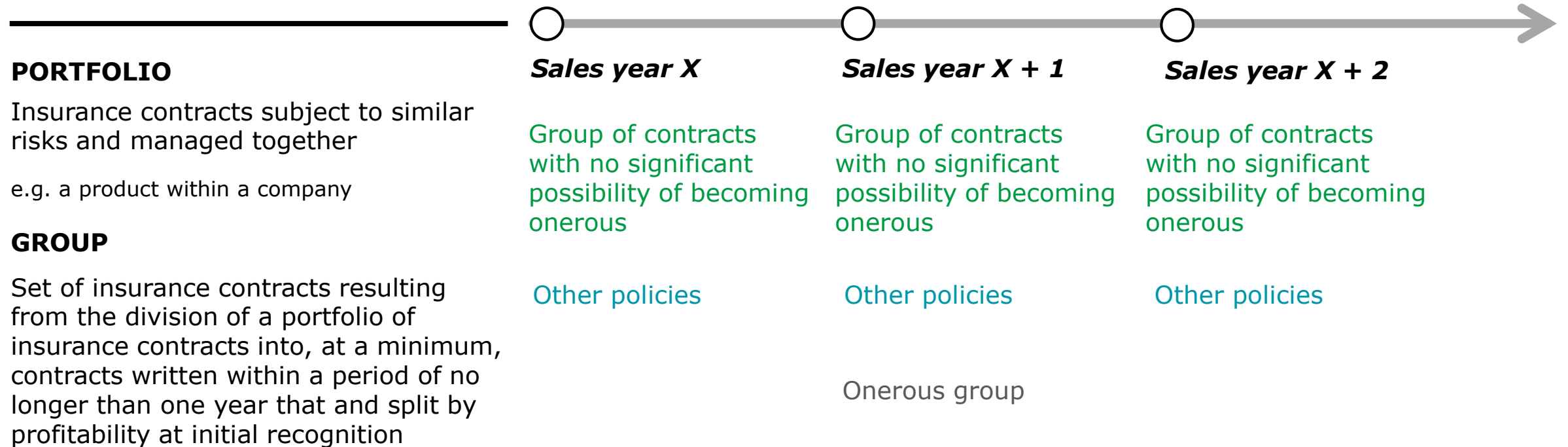
CSM at subsequent periods

The level to be consistent with initial recognition guaranteeing that at the end policy term, CSM is fully recognised

Aggregation levels for calculations in IFRS 17
Unit of account

PORTFOLIO

Insurance contracts subject to similar risks and managed together

e.g. a product within a company

GROUP

Set of insurance contracts resulting from the division of a portfolio of insurance contracts into, at a minimum, contracts written within a period of no longer than one year that and split by profitability at initial recognition

Sales year X

Group of contracts with no significant possibility of becoming onerous

Other policies

Sales year X + 1

Group of contracts with no significant possibility of becoming onerous

Other policies

Onerous group

Sales year X + 2

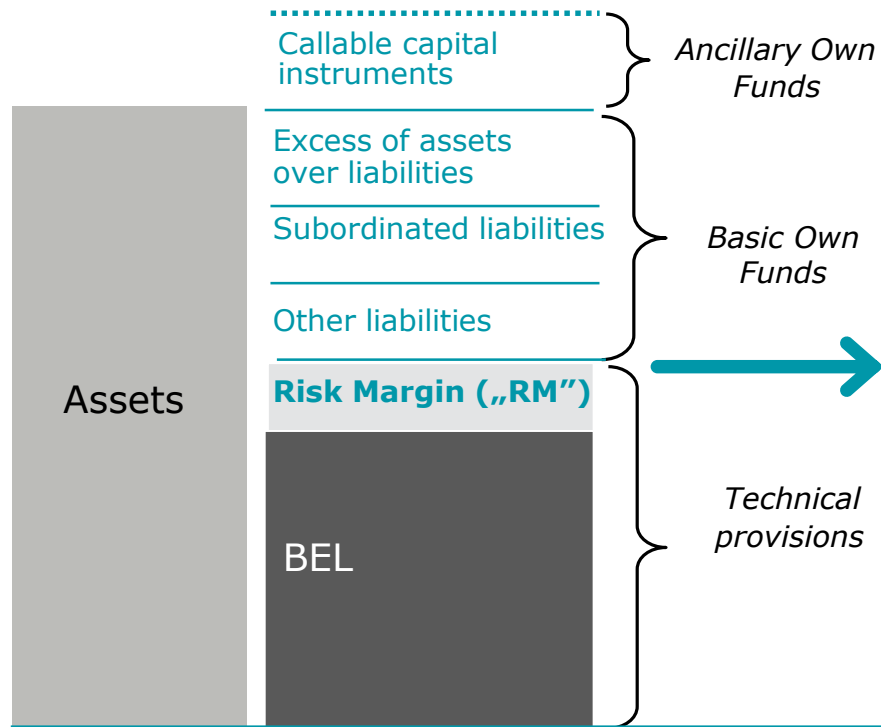Group of contracts with no significant possibility of becoming onerous

Other policies

Other considerations
New format of financial statement and other disclosures

# Solvency II and IFRS 17

Solvency II
Typical balance sheet

Solvency II typical balance sheet:

- Assets
- Callable capital instruments — *Ancillary Own Funds*
- Excess of assets over liabilities
- Subordinated liabilities — *Basic Own Funds*
- Other liabilities
- Risk Margin („RM")
- BEL — *Technical provisions*

IFRS17
Typical balance sheet   Income statement

IFRS17 typical balance sheet:

- Goodwill
- Assets
- Shareholder equity
- Other liabilities
- Contractual Services Margin („CSM") — Release of CSM
- Risk Adjustment („RA") — Release of RA related to current period
- BEL — Changes in cash flows related to past & current services | *Income statement (underwriting result)*
- Interest on Insurance liability
- Changes in discount rates | *Income statement (investment result)*

POTENTIAL FINANCIAL IMPACTS

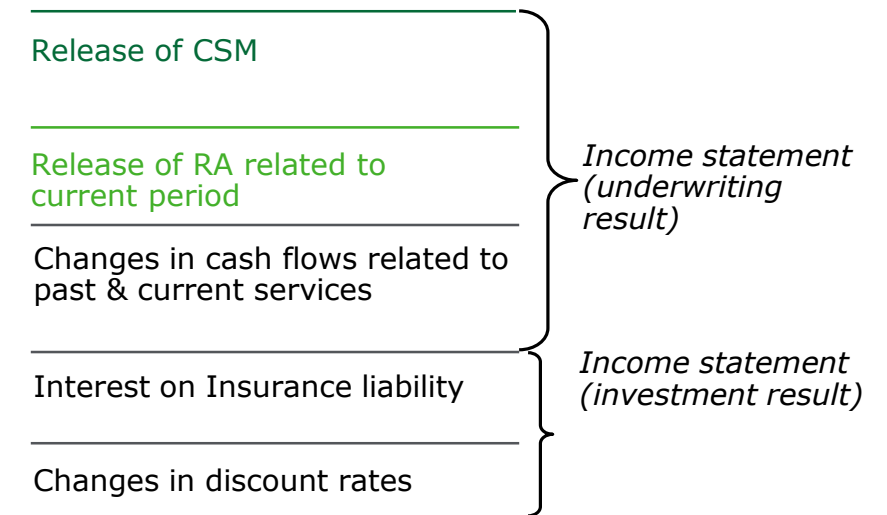- **No „first-day profit" thanks to its deferral through CSM**
- Much smoother profit profile
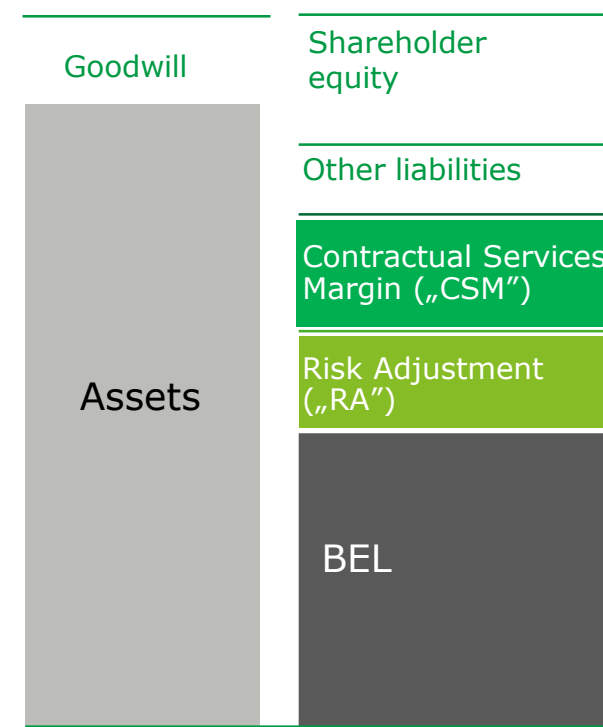
POTENTIAL BUSINESS IMPACTS

- Significant volumes of data to be stored
- **Actuarial assumptions changes directly affecting profit profile**
- Actuarial valuation models to be integrated with accounting systems
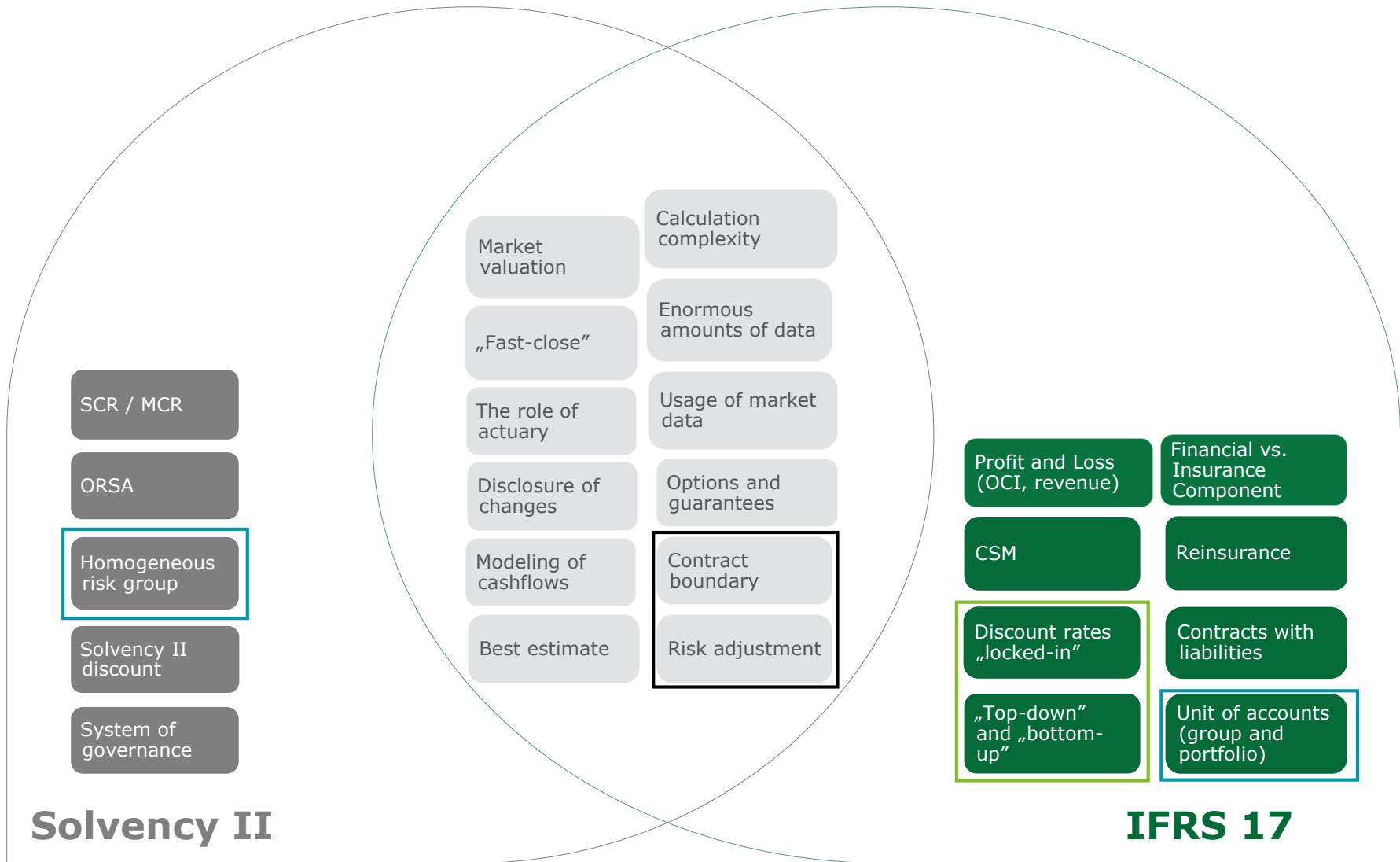- Level of granularity for required disclosures

New Presentation and Disclosure
Statement of Comprehensive Income

Operating Result	**(WU) = (a) - (f)**
Insurance Contracts Revenue	(a) = (b) + (c) +(d) + (e)
Change in CSM	(b)
Change in Risk Adjustment	(c)
Amortisation of acquisition costs	(d)
Expected claims and expenses	(e)
Insurance expenses	(f) = (g) + (h) +(i) + (j)
Incurred expenses and paid claims	(g)
Incurred acquisition costs	(h)
Recognised losses from onerous contracts	(i)
Changes in insurance liabilities	(j)
Investment Result	**(WI) = (k) – (l)**
Investment income	(k)
Investment expenses	(l) = (m) + (n) + (o)
Accretion of CSM	(m)
Accretion of RA	(n)
Accretion of insurance liabilities	(o)
Total Income	**(WU) + (WI)**

Release of part of CSM allocated to current period

Release of part of RA related to risk expired in the current period

Expected claims and expenses in the current period

Actual incurred claims and expenses in the current period

Loss for „onerous contracts"

In case of changes in liabilities for expired cover or in case when CSM cannot absorb negative deviations

Cost related to the unwind of the discount rate in valuation of liabilities

Solvency II vs. IFRS 17
Synergies and differences

Solvency II

- SCR / MCR
- ORSA
- Homogeneous risk group
- Solvency II discount
- System of governance

Intersection

- Market valuation
- Calculation complexity
- „Fast-close"
- Enormous amounts of data
- The role of actuary
- Usage of market data
- Disclosure of changes
- Options and guarantees
- Modeling of cashflows
- Contract boundary
- Best estimate
- Risk adjustment

IFRS 17

- Profit and Loss (OCI, revenue)
- Financial vs. Insurance Component
- CSM
- Reinsurance
- Discount rates „locked-in"
- Contracts with liabilities
- „Top-down" and „bottom-up"
- Unit of accounts (group and portfolio)

Part 4: Transition

Introduction to Transition

Introduction
Important dates

Contract sales

Comparative information

IFRS 17 comes into force

	2020	2021
		Q1　Q2　Q3

„Early application"

Permitted for entities that apply IFRS 9 Financial Instruments and IFRS 15 Revenue from Contracts with Customers on or before the date of initial application of IFRS 17

„Transition date"

The beginning of the annual reporting period immediately preceding the date of initial application

„Date of initial application"

The beginning of the annual reporting period in which an entity first applies IFRS 17
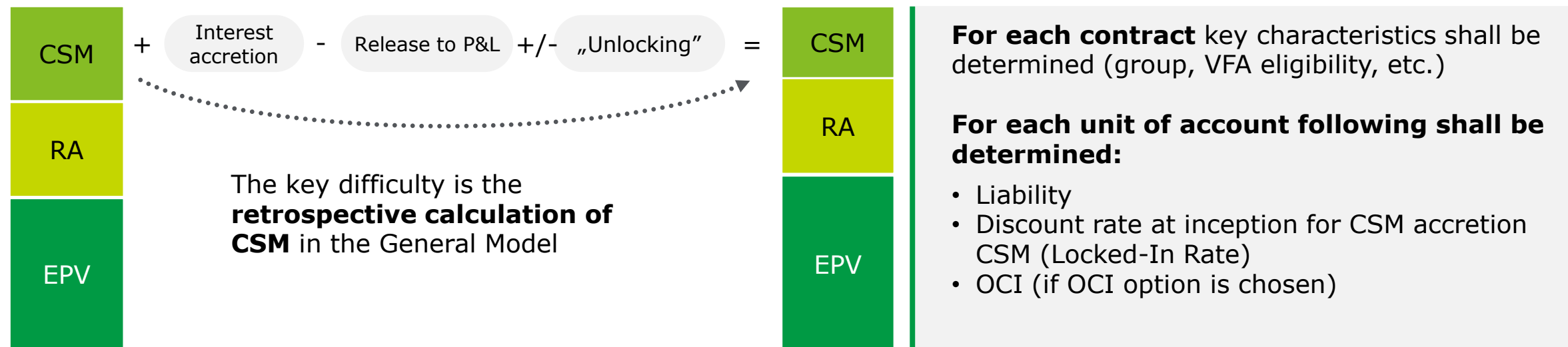
First annual reporting

An entity shall apply IFRS 17 for annual reporting periods beginning on or after 1 January 2021.

Introduction
Valuation on the Transition date

Principle: identify, recognise and measure each group of insurance contracts as if IFRS 17 had always applied

Introduction
Basic definitions

Three possible approaches to be applied:

The **retrospective approach** should be applied to groups of insurance contracts, unless **it is impracticable** or if groups at inception of contracts in force on transition cannot be identified.

When **impracticable** to apply the retrospective approach, an entity is then permitted to choose between the **modified retrospective approach** and the **fair value approach**.

Key definitions in transition

" *IFRS 13: **Fair value** is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (IFRS 13.A)*

" *IAS 8: Applying a requirement **is impracticable** when the entity cannot apply it after making every reasonable effort to do so. (IAS 8.5).*

Overview of Methods

Method 1: Full retrospective approach
Basic assumptions

To apply IFRS 17 retrospectively, an entity shall at the transition date:

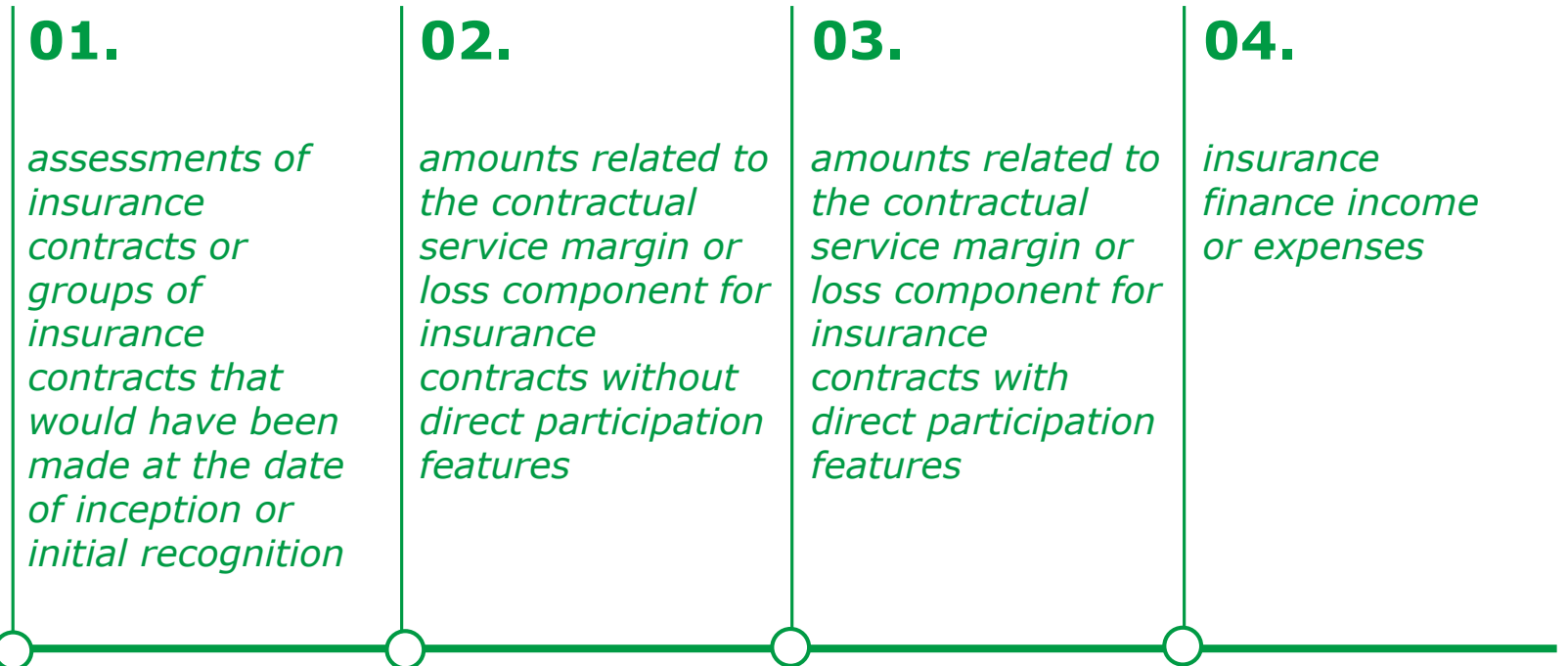| 01.	02.	03.
identify, recognise and measure each group of insurance contracts as if IFRS 17 had always applied;	derecognise any existing balances that would not exist had IFRS 17 always applied; and	recognise any resulting net difference in equity.

Method 2: Modified retrospective approach
Basic assumptions

The objective of the modified retrospective approach is to achieve the closest outcome to the retrospective application possible.

An entity shall:

A. use reasonable and supportable information;

B. maximise the use of information that would have been used to apply a fully retrospective approach, but need only information available without undue cost or effort.

Permitted modifications to the retrospective method:

01.

assessments of insurance contracts or groups of insurance contracts that would have been made at the date of inception or initial recognition

02.

amounts related to the contractual service margin or loss component for insurance contracts without direct participation features

03.

amounts related to the contractual service margin or loss component for insurance contracts with direct participation features

04.

insurance finance income or expenses

An entity is permitted to use each modification only to the extent that an entity does not **have reasonable and supportable** information to apply a retrospective approach.

Method 3: Fair value approach
Basic assumptions

The CSM or loss component is difference between:

- the fair value of a group of insurance contracts at that date; and

- the fulfilment cash flows measured at that date

To determine:

- how to identify groups of insurance contracts

- whether a contract meets the definition of a contract with direct participation features

- how to identify discretionary cash flows for contracts that do not meet upper definition

An entity may determine the matters based on data on:

- inception,

- transition.

An entity may include in a group contracts issued more than one year apart.

Comparison of methods available
Basic assumptions

Fully retrospective approach:	Modified retrospective approach:	Fair value approach:
Pros		
In most cases gives highest level of CSM to allocate/spread in future years	Less data required	Simplest method
Additional future reconciliation and disclosures not required after transition	Relatively high freedom in choosing approach	Historical data not required
Comparable with new cohorts		
Not required proof of lack of impracticability		
Cons		
Big amount of data required	Needs proof that fully retrospective method is impracticable	Needs proof that fully retrospective method is impracticable
May be more complex computationally	Requires future disclosures	Requires future disclosures
	Less comparable with new cohorts	Incomparable with new cohorts
		Challenges connected with Fair Value for insurance liabilities
		Lack of/low CSM to allocate?

Introduction
Basic principles (1/2)

Sales cohort for a portfolio
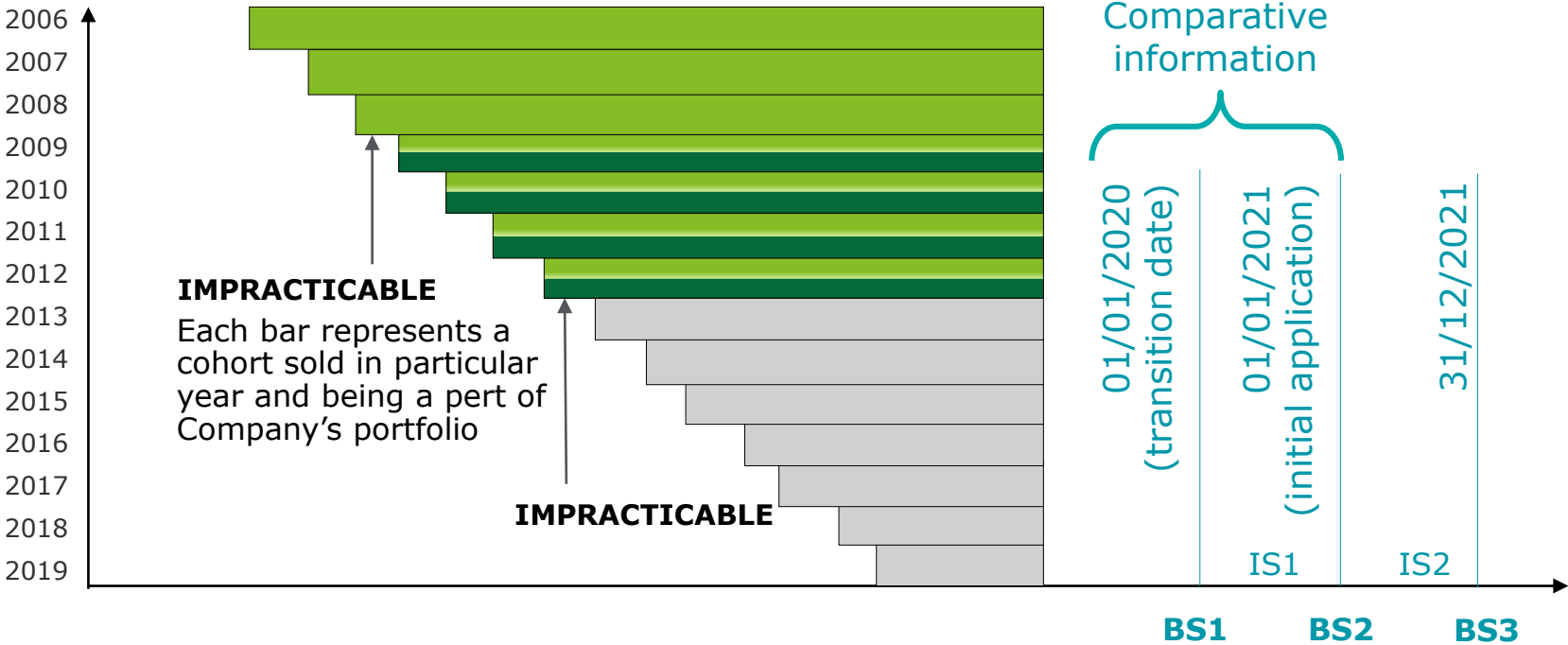
Full retrospective application of the new requirements is required, unless this is impracticable.

Where impracticable, the Company can either apply:

- the simplified approach, and fair value approach from next impracticability point onwards, or
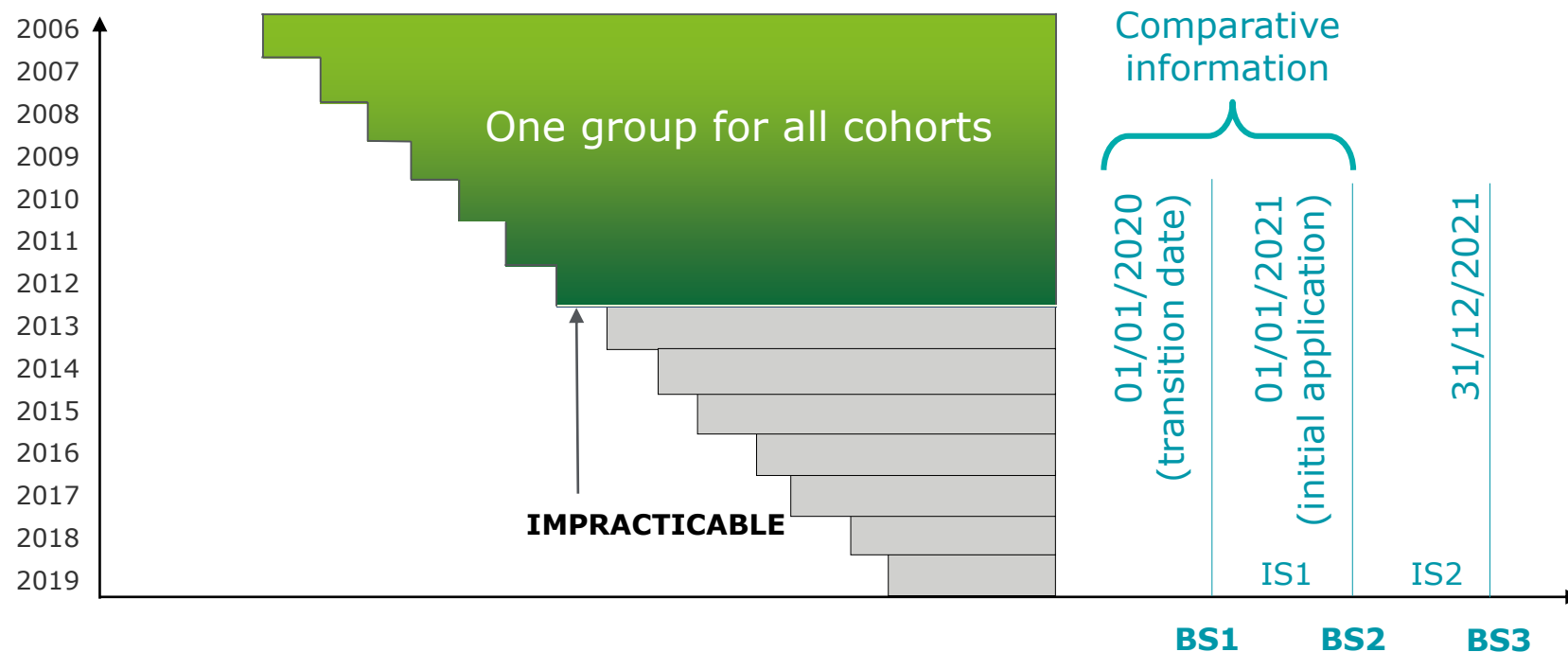
- the fair value approach.

Approach:

Fully retrospective

Modified retrospective

Fair value

BS = Balance Sheet

IS = Income Statement

Introduction
Basic principles (2/2)

Sales cohort for a portfolio

Grouping by sales periods may not always be possible (e.g. IT system limitations, loss of data).

Such situation may prevent from setting CSM amortisation factor and discount rate curves „locked-in".

For such documented cases, simplification is permissible

Approach:

Fully retrospective

Modified retrospective

Fair value

BS = Balance Sheet

IS = Income Statement

Part 4: Examples

Example 1: Simple insurance contract accounting

Simple insurance contract

Building Block Approach Insurance Liability

Contract

- Single premium 100,0
- Duration: 3 years
- Acquisition costs: 4,0

Expected outflows

- 1. year: 10,0
- 2. year: 23,0
- 3. year: 50,0

Risk adjustment

- 1. year: 5,0
- 2. year : 6,0
- 3. year : 7,0

Discounting

PV of cash inflows:	
Single Premium	-100,0

PV of cash outflows	
Acquisition costs	4,0
Expected outflows	83,0
Discounting	-7,7
Total	**79,3**

Risk adjustment	
Risk adjustment for 3 years	18,0
Discounting	-1,4
Total	**16,6**

Contractual service margin	4,1

Insurance liability at inception	0,0

a) Comprehensive income at contract inception

Assets		Liabilities	Expenses		Revenue
	Profit	0,0			
	OCI	0,0			
	Capital	**0,0**			
	Insurance Liability				
	a) PV CF inflows	-100,0			
	a) PV CF outflows	79,3			
	a) Risk adjustment	16,6			
	a) CSM	4,1			
	Total	**0,0**			

b) Premium received and commission payed out

Assets			Liabilities	Expenses		Revenue
			Profit	0,0		
Cash			OCI	0,0		
b) Premium	100,0		**Capital**	**0,0**		
b) Commission	-4,0					
Cash		**96,0**	**Insurance liability**			
			a) PV CF inflows	-100,0		
			a) PV CF outflows	79,3		
			b) Prem. Payment	100,0		
			b) Comm. Payment	-4,0		
			EPV CF	**75,3**		
			a) Risk adjustment	16,6		
			a) CSM	4,1		
			Insurance liability	**96,0**		

c)-h) After 1ˢᵗ year (actual = expected)

Assets			Liabilities	
			Profit	2,5
Cash			OCI	0,0
b) Premium	100,0		**Capital**	**2,5**
b) Commission	-4,0			
g) Claims	-10,0		**Insurance liability**	
Cash	**86,0**	a)	PV CF inflows	-100,0
		a)	PV CF outflows	79,3
		b)	Prem. Payment	100,0
		b)	Comm. Payment	-4,0
		g)	Discount unwind	3,0
		h)	Claims	-10,0
			EPV CF	**68,3**
		a)	Risk adjustment BoP	16,6
		d)	RA release	-5,0
		g)	Discount unwind	0,7
			Risk adjustment	**12,3**
		a)	CSM BoP	4,1
		d)	CSM release	-1,4
		g)	Discount unwind	0,2
			CSM	**2,9**
			Insurance Liability	**83,5**

Expenses			Revenue	
			Insurance Revenue	
c) Claims	10,0	c)	Claims	10,0
f) Interest	3,9	d)	RA Release	5,0
		e)	CSM Release	1,4
Total	**13,9**		**Total**	**16,4**

> c) **Claims – costs**
> d) **Release of Risk Adjustment**
> e) **Release of CSM**
> f) **Interest accreted**
> g) **Claims payment (including any fund)**

Example 2: Where did my premiums disappear

Illustrative example - introduction

- Term insurance product

  Annual premium 100

  Death benefit 1000

- *No risk adjustment & no discount assumed for simplicity*

Projected number of policies at inception

Year	1	2	3	4	5	6	7	8	9	10
# of policies	10	10	10	10	10	5	5	5	5	5
# of deaths	0	0	0	0	0	0	0	0	0	0
# of surrenders	0	0	0	0	**5**	0	0	0	0	0
# of maturities	0	0	0	0	0	0	0	0	0	5

Projected CFs at inception

Year	1	2	3	4	5	6	7	8	9	10
Premium	1000	1000	1000	1000	500	500	500	500	500	500
Claims	0	0	0	0	0	0	0	0	0	0

=> Fulfillment CFs = -7000 (block 1, 2, 3)

=> CSM = 7000 (block 4)

Illustrative example – Actual = Expected

Actual number of policies

Year	1	2	3	4	5	6	7	8	9	10
# of policies	10	10	10	10	10	5	5	5	5	5
# of deaths	0	0	0	0	0	0	0	0	0	0
# of surrenders	0	0	0	0	5	0	0	0	0	0
# of maturities	0	0	0	0	0	0	0	0	0	5

Actual CFs

Year	1	2	3	4	5	6	7	8	9	10
Premium	1000	1000	1000	1000	500	500	500	500	500	500
Claims	0	0	0	0	0	0	0	0	0	0

Illustrative P&L

Year	1	2	3	4	5	6	7	8	9	10	Total
Expected claims and expenses	0	0	0	0	0	0	0	0	0	0	0
Experience adjustments - P&L	0	0	0	0	0	0	0	0	0	0	0
Contractual service margin release	966	966	966	966	724	483	483	483	483	483	7000
Total revenue	**966**	**966**	**966**	**966**	**724**	**483**	**483**	**483**	**483**	**483**	**7000**
Claim expenses	0	0	0	0	0	0	0	0	0	0	0
Total expenses	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Operating result	**966**	**966**	**966**	**966**	**724**	**483**	**483**	**483**	**483**	**483**	**7000**

Illustrative example – More surrenders

Actual number of policies

Year	1	2	3	4	5	6	7	8	9	10
# of policies	10	10	10	10	10	4	4	4	4	4
# of deaths	0	0	0	0	0	0	0	0	0	0
# of surrenders	0	0	0	0	6	0	0	0	0	0
# of maturities	0	0	0	0	0	0	0	0	0	4

Actual CFs

Year	1	2	3	4	5	6	7	8	9	10
Premium	1000	1000	1000	1000	400	400	400	400	400	400
Claims	0	0	0				0	0	0	0

Illustrative P&L

Year	1	2	3	4	5	6	7	8	9	10	Total
Expected claims and expenses	0	0	0	0	0			0		0	0
Experience adjustments - P&L				0	-100	0	0			0	-100
Contractual service margin release	966	966	966	966	724	383	383	383	383	383	6500
Total revenue	**966**	**966**	**966**	**966**	**624**	**383**	**383**	**383**	**383**	**383**	**6400**
Claim expenses	0	0	0	0	0	0	0				0
Total expenses	**0**	**0**	**0**	**0**	**0**	**0**	**0**				**0**
Operating result	**966**	**966**	**966**	**966**	**624**	**383**	**383**	**383**	**383**	**383**	**6400**

> **Loss of premium of 100 in the 5th year (loss recognized immediately in P&L through correction of insurance revenue)**

> **CSM in 5th year is decreased by 500 because of less premium in future years**

> **CSM amortization pattern stays the same**

> **600 of annual premium lost => -600 in profit**

Illustrative example – Less surrenders

Actual number of policies

Year	1	2	3	4	5	6	7	8	9	10
# of policies	10	10	10	10	10	6	6	6	6	6
# of deaths	0	0	0	0	0	0	0	0	0	0
# of surrenders	0	0	0	0	4	0	0	0	0	0
# of maturities	0	0	0	0	0	0	0	0	0	4

Actual CFs

Year	1	2	3	4	5	6	7	8	9	10
Premium	1000	1000	1000	1000	600	600	600	600	600	600
Claims	0	0	0		0	0	0	0	0	0

Illustrative P&L

Year	1	2	3	4	5	6	7	8	9	10	Total
Expected claims and expenses	0	0	0	0	0	0	0			0	0
Experience adjustments - P&L			0	100	0	0				0	0
Contractual service margin release		966	724	583	583	583	583	583			7500
Total revenue	**966**	**966**	**966**	**966**	**824**	**583**	**583**	**583**	**583**	**583**	**7600**
Claim expenses	0	0	0	0	0	0	0				0
Total expenses	**0**	**0**	**0**	**0**	**0**	**0**	**0**				**0**
Operating result	**966**	**966**	**966**	**966**	**824**	**603**	**603**	**603**	**603**	**603**	**7600**

Gain of premium of 100 in the 5th year

CSM in 5th year is increased by 500 because of more premium in future years

CSM amortization pattern stays the same

600 of annual premium more => +600 in profit

Thank you!
Questions?

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