

# IFRS 17 & Solvency II Workshop

## IFRS 17 Background

**Carlos Arocha, FSA**

CNseg—Confederação Nacional das Empresas de Seguros

São Paulo, 15—17 July 2019



# Presentation Disclaimer

*Presentations are intended for educational purposes only and do not replace independent professional judgment. Statements of fact and opinions expressed are those of the participants individually and, unless expressly stated to the contrary, are not the opinion or position of the Society of Actuaries, its cosponsors or its committees. The Society of Actuaries does not endorse or approve, and assumes no responsibility for, the content, accuracy or completeness of the information presented.*

# Agenda

## Monday, 15 July

- Recap of IFRS 17 Background
- General Measurement Model
- Reinsurance and Contracts Acquired
- Implementing IFRS 17

## Tuesday, 16 July

- Measurement of direct participation contracts
- Illustrative examples of the Premium Allocation Approach
- Presentation of IFRS 17 Results
- Data management and calculation engines
- Background and Scope of Solvency II
- Quantitative Aspects of Solvency II

## Wednesday 17 July

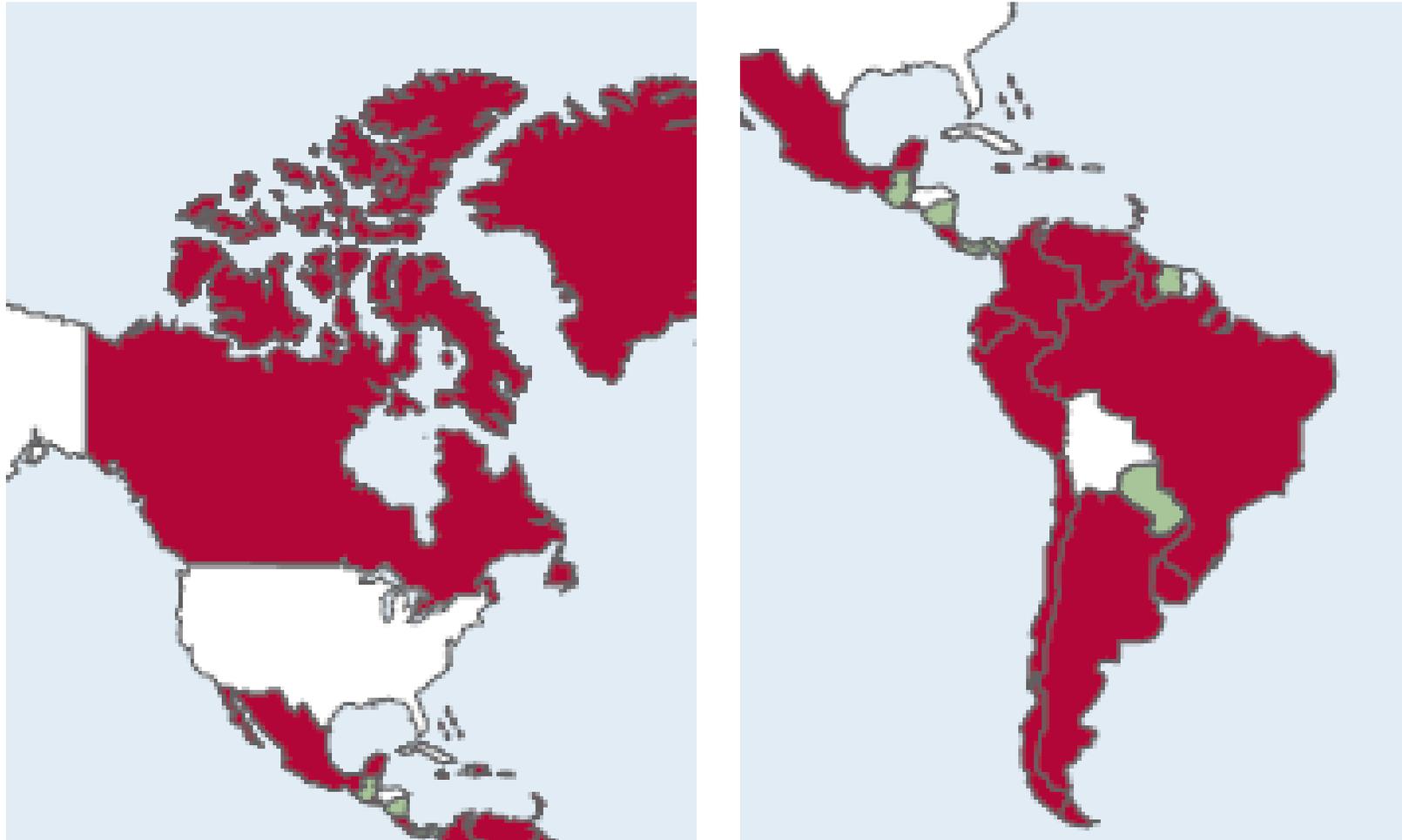
- Quantitative Aspects of Solvency II (cont'd)
- Governance under Solvency II
- The Risk Management & Reporting Processes

The purpose of financial reporting is to evaluate the degree to which a firm's accounting captures its underlying business reality.

# Background of IFRS 17



# Scope of IFRS in Latin America (2018)



Source: IASB

- Profiled jurisdictions requiring IFRS Standards: 27
- Profiled jurisdictions permitting IFRS Standards: 8

# Process engineering

May 2017

IFRS® Standards

IFRS 17 Insurance Contracts



**IFRS 17**

- Conceived in 1997
- IFRS 4 adopted in 2004
- Effective 1.1.2022



**St. Gotthard's Base Tunnel (57 km)**

- Work started on 4.11.1999
- Fully operational on 1.6.2016

# Liabilities

- A liability is a claim on assets by creditors that represents an obligation to make a future payment of cash, goods, or services
- A liability is recognized when
  - the obligation is based on benefits or services received currently or in the past
  - the amount and timing of payment is reasonably certain



# Sample Income Statement

## Notes:

1. Statement does not comply with IFRS 17
2. Written premiums include deposits
3. Written premiums and expenses correspond to each reporting year, but claims correspond to current and past reporting years
4. Reserve adjustments include the present value of future premiums
5. Insurance and investment earnings from insurance contracts are not separated

USD m	2018	2017
<b>Revenue</b>		
Gross written premiums	52,689	52,006
Premiums ceded to reinsurance	-8,255	-7,977
Net written premiums	44,434	44,029
Change in unearned premium reserve	-224	-79
Net earned premiums	44,210	43,950
Investment returns	1,914	18,913
Other income	1,056	1,099
<b>Total Revenue</b>	<b>47,180</b>	<b>63,962</b>
<b>Claims and expenses</b>		
Gross claims	33,483	34,894
Claims ceded to reinsurance	-5,837	-6,252
Claims net of reinsurance	27,646	28,642
Policyholder dividends	-2,736	12,984
Net acquisition expenses	8,565	9,039
Administrative expenses	7,761	7,212
Financial expenses	402	411
Interest accreted to policyholders	433	546
<b>Total Claims and Expenses</b>	<b>42,071</b>	<b>58,834</b>
Pre-tax income	5,109	5,128
Taxes	-1,132	-1,819
<b>Net Income</b>	<b>3,977</b>	<b>3,309</b>

# Implications of IFRS 17

---

<b>Comparability</b>	<ul style="list-style-type: none"><li>• International standard</li><li>• Currently, IFRS 4 Phase 2 allows the use of local reporting standards</li><li>• Better comparability is expected (particularly for insurance groups)</li></ul>
<b>Cash and dividends</b>	<ul style="list-style-type: none"><li>• Expected mismatches between IFRS 17 (economic perspective) and statutory accounting (historical perspective)</li><li>• Shareholder dividends are usually determined based on statutory accounting</li></ul>
<b>Economic valuation</b>	<ul style="list-style-type: none"><li>• IFRS 17 aligned with Solvency II and economic capital</li><li>• May create volatility</li><li>• Required reconciliations may be more intuitive</li></ul>
<b>Profit</b>	<ul style="list-style-type: none"><li>• More transparency expected</li><li>• Better insight into profit sources</li><li>• More scrutiny regarding the amortization of the contractual service margin</li></ul>

# IFRS 17: key features

---

Dynamism	<ul style="list-style-type: none"><li>• <b>Fulfilment cash flows</b> (FCF) estimates and assumptions updated at each reporting</li></ul>
Time-value of money	<ul style="list-style-type: none"><li>• FCF's reflect the time value of money</li></ul>
Market-consistency	<ul style="list-style-type: none"><li>• FCF's estimates use all available market information</li></ul>
Risk	<ul style="list-style-type: none"><li>• Periodic reassessment of risk margins</li></ul>
Deferral of profit on initial recognition	<ul style="list-style-type: none"><li>• On initial recognition, profit is deferred and aggregated in groups of insurance contracts</li></ul>
Adjustments to expected profit	<ul style="list-style-type: none"><li>• Expected profit recognized over coverage period after adjusting for changes in assumptions in FCF's</li></ul>

# Recap



# Insurance contract liability



# Fulfilment cash flows

- Risk-adjusted present value of the entity's rights and obligations to the policyholders, comprising:
  - estimates of future cash flows
  - discounting
  - a risk adjustment for non-financial risk
- Simplifying:  $FCF = \sum_t CF_t (1 + r_t)^{-t}$ , where  $r_t$  is the risk-adjusted discount rate
- FCF's must be recalculated at each reporting date

FCF

# Contractual service margin

- A component of the carrying amount of the asset or liability for a group of insurance contracts representing the unearned profit the entity will recognize as it provides services under the insurance contracts in the group
- The CSM cannot be negative

CSM

# What are onerous contracts?

- A group of insurance contracts is onerous if on initial recognition, the sum of the items below is an expense
  - fulfilment cash flows
  - acquisition cash flows previously recognized; and
  - cash flows from the contracts
- On subsequent measurements, if a group of contracts becomes onerous, the excess must be recognized as a loss
  - Therefore, the CSM cannot increase and the entity cannot recognize income until the amount previously recognized is transformed into a gain from the group of insurance contracts



# Changes in liability

	$\Delta$ book value of liability for remaining coverage	$\Delta$ book value of liability for incurred claims
Ordinary income	<ul style="list-style-type: none"> <li>reduction of liability due to service provided in the period</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
Insurance service expenses	<ul style="list-style-type: none"> <li>losses in onerous contract groups and adjustments to such losses</li> </ul>	<ul style="list-style-type: none"> <li>increase in liability due to incurred claims during period</li> <li>subsequent changes in fulfilment cash flows related to claims and claim adjustment expenses</li> </ul>
Insurance finance expenses	<ul style="list-style-type: none"> <li>effect of inflation</li> <li>effect of changes in financial risk assumptions</li> </ul>	<ul style="list-style-type: none"> <li>effect of inflation</li> <li>effect of changes in financial risk assumptions</li> </ul>

# What is insurance finance income/expense?

- Change in book value of a group of contracts originated from
  - time-value of money
  - adjustments of financial risk assumptions
- The entity can choose between
  - recognize all finance income/expenses on profit/loss
  - disaggregate finance income/expenses between profit/loss and other comprehensive income
- Insurance contracts are subject to the effect of Exchange rates (cf. **IAS 21**, *“The Effect of Changes in Foreign Exchange Rates”*)
  - differences in book value of insurance contracts must be recognized in profit/loss unless the differences relate to changes included in other comprehensive income



# Profit or loss

Insurance service result	
Insurance revenue	+ Revenue for coverage provided in the period
	+ Revenue for the release or risk adjustment in the period
Insurance service expenses	- Expected claims and other insurance service expenses
	+/- Changes in cash flows and risk adjustment

Insurance finance expenses	- unwind of discount rates	+/- changes in discount rates
Other comprehensive income (opcional)		+/- changes in discount rates

# Insurance and financial risks

---

## Insurance risks

The policyholder transfers risk to the entity, and the entity assumes the risk

### Examples

- mortality and longevity
- accident and sickness
- disability
- property damage, theft
- contractual default (e.g., credit insurance)

---

A contract is not an insurance contract if there is no substantial exposure to insurance risks

## Financial risks

Risk of changes in macroeconomic factors that may have an impact on the entity

### Examples

- Interest rates
- Price of financial instruments
- Price of commodities
- Exchange rates
- Credit quality ratings

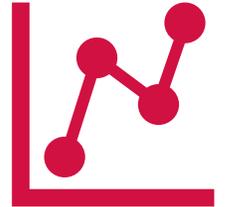
---

Risk originates as premiums flow in the entity

---

# Discount rates

- Discount rates are used to calculate the present value of contractual cash flows
- Requirements:
  - must reflect time-value of money, liability cash flow features and contract liquidity
  - must be consistent with market prices (if existent) for assets whose cash flows are similar to the liability cash flows
  - must exclude the impact of factors inherent to market prices that do not impact the liability cash flows
- In building discount rates, only factors that are relevant to the liability cash flows should be considered
- Two approaches to build discount rates:
  - bottom-up
  - top-down



# Contract boundaries

Cash flows are within contract boundaries when the entity

- (1) can compel the policyholder to pay premiums; or
- (2) has a substantive obligation to provide the policyholder with services

**This substantive obligation ends when:**

- The entity has the 'practical ability' to reassess the risks of the particular policyholder and can set a price or level of benefits that fully reflects these reassessed risks; or
- The following two conditions are met:
  - a) the entity has the 'practical ability' to reassess the risk of the portfolio of insurance contracts that contains the contract and can set a price or level of benefits that fully reflects the risk of that portfolio; and
  - b) the pricing of the premiums for coverage up to the reassessment date does not take into account the risks that relate to periods after the reassessment date

# Measurement Models



# Presentation

## General Model

Contractual service margin

Adjustment for non-financial risk

Discount rates

Expected value of fulfilment cash flows

## Premium Allocation Approach

Liability for remaining coverage

Adjustment for non-financial risk

Discount rates

Expected value of fulfilment cash flows

## Variable Fee Approach

(variant of the general model)

# General Measurement Model

## Building Blocks

Contractual service margin

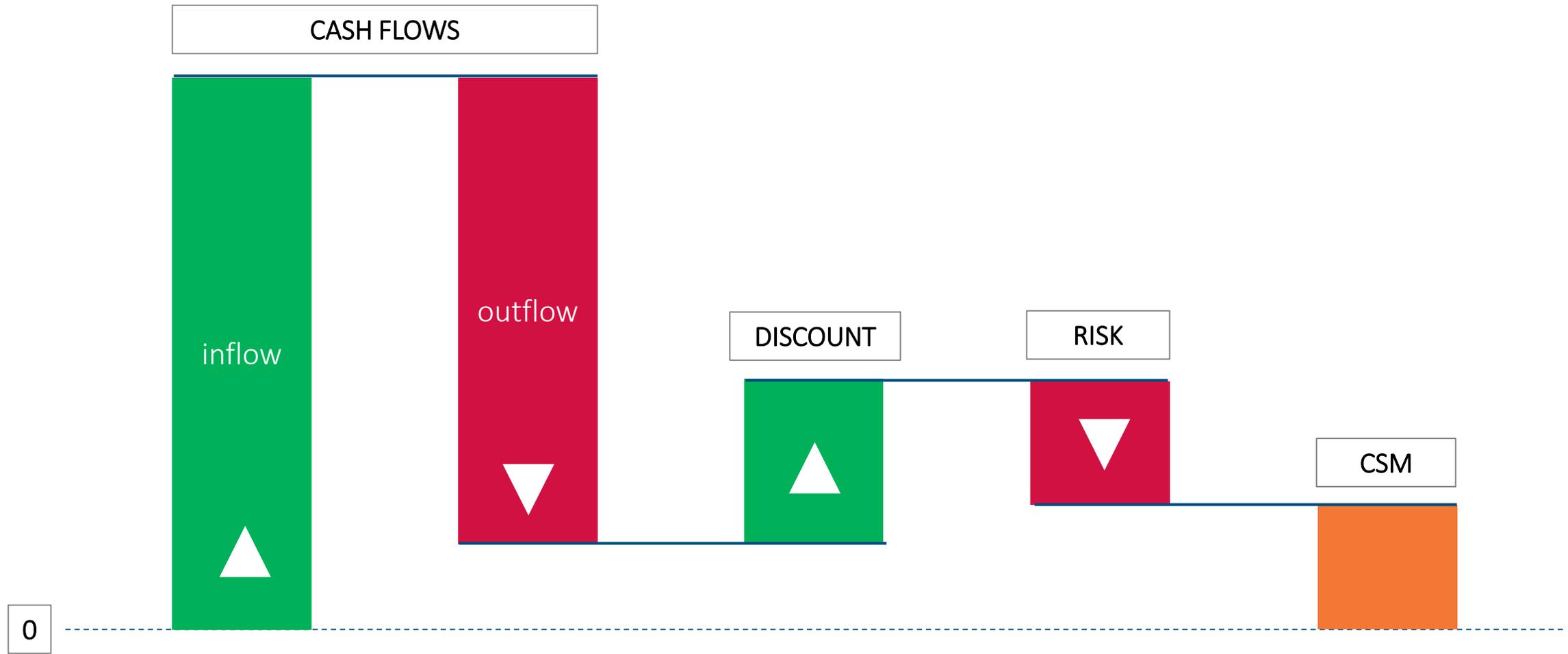
Risk adjustment for non-financial risk

Discount rate

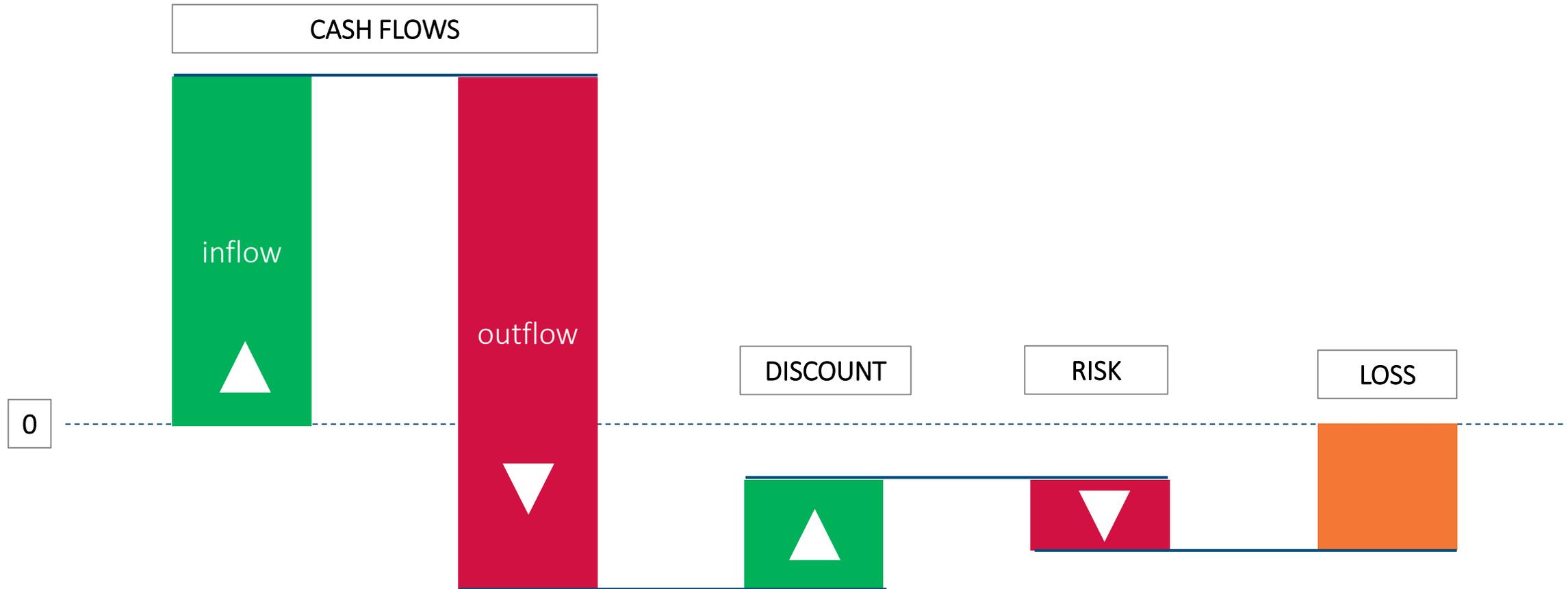
Expected value of cash flows

Cash flows	Probability-weighted cash flows within contract boundaries
Discount rate	Yield curve that reflects the liability characteristics
Initial CSM	Net difference of fulfilment cash flows
Release of CSM	With passage of time, reflecting coverage units
Aggregation	Grouping that avoid onerous contracts; never with a difference larger than 12 months
Subsequent measurement	Profit/loss with respect to past service; CSM with respect to future service

# Initial Recognition



# Initial Recognition—Loss



# Coverage Units



# Coverage Units

- Coverage units are used to allocate the CSM to the current period
- The number of coverage units in a group is the quantity of coverage provided by the contracts in the group, determined by considering for each contract, the quantity of benefits provided and its expected coverage duration
- Examples:



Product	Possible definition of coverage unit
Life insurance, fixed benefits	sum assured
Deferred annuities	fund accumulated at retirement or guaranteed benefit

 IFRS 17 is principles-based

## Paragraph B119 (summary)

An amount of the CSM is recognized in profit or loss each period to reflect services provided under the group of insurance contracts in that period. The amount is determined by:

- a) identifying the coverage units in the group
- b) allocating the CSM equally to each coverage unit provided in the current period and expected to be provided in the future
- c) recognizing in profit/loss the amount allocated to the coverage units provided in the period



Carlos Arocha  
ca@ArochaAndAssociates.ch

