BB SEGUROS

IFRS 17

Version 1: 05-15-2023

Disclaimer

This document was prepared to help investors and other stakeholders understanding how the adoption of IFRS 17 as of January 2023, according to the Brazilian Stock Exchange Rule No. 42/2021, impacts the financial statements of BB Seguridade's investees operating insurance contracts within the scope of IRFR 17 – Brasilseg, Brasilprev and Brasildental – and therefore the equity investment balance and equity income at the holding co. level.

This is an initial guide containing the main concepts, assumptions, models etc to assess the company's P&L and balance sheet in the new accounting standard, according to BB Seguridade's own opinion. This document does not intend to be exhaustive, therefore should not replace individual studies and interpretation of the rules, as well as exclude the reading of the audited financial statements of BB Seguridade, and maybe subject to future updates as the internal knowledge evolves.

IFRS 17 – Insurance Contracts

Historical context of IFRS 17 development and adoption

The accounting standards of IFRS 17 aims to solving the informational assimetry created by the several number of accounting practices within the global insurance market that has been harming the comparability of financial information released by insurance companies from different locations.

IFRS 4 (2004)	Accounting standards adopted until 2022
IFRS 17 (2017)	Release of IFRS 17 rules by IASB replacing IFRS 4
Postponement of IFRS 9 and IFRS 17 (2021) adoption	Permission granted to insurers to adopt IFRS 9 together with IFRS 17 as of January 2023
CPC-50 (2021)	Translation of IFRS 17 by the Brazilian Accounting Committee with the issuance of CPC 50 [IFRS 17]
Brazilian SEC Rule No. 42 (2021)	Adoption of CPC 50 [IFRS 17] by the Brazilian SEC (CVM) obligating public-held insurers to prepare and report financial information according to the new standards
Effectiveness of IFRS 17 (2023)	Preparation and disclosure of financial information according to CPC 50 [IFRS 17]

Attention marks

The Brazilian Insurance and Private Health System Regulators (Susep | ANS) have not adopted CPC 50 [IFRS 17] to their segments.

Considering that BB Seguridade is a public-held holding co., its investees operating insurance and financial contracts within the new rules shall recognize their portfolios and prepare their financial statements in compliance with the new standards, impacting the holding co.'s accounting of equity investment balance and income.

The application of the new rules for accounting standardization purpose will not impact both the regulatory capital management and the dividend policies within the conglomerate while Susep & ANS do not adopt CPC 50 [IFRS 17].

The investees Brasilseg, Brasilprev and Brasildental operate insurance contracts within the scope of CPC 50 [IFRS 17]. Brasilcap, BB Corretora and Ciclic aren't impacted.

Source: Trevisan Magazine (https://rtrevisan.emnuvens.com.br/revistatrevisan/article/view/73); https://www.iasplus.com/en/standards/ifrs/ifrs4 ; https://www.iasplus.com/en/standards/ifrs/ifrs-17 ; Data as of: 03/30/2023)

IFRS 17 – Insurance Contracts

Insurance contracts vs. financial contracts

In the insurance contract, the underwriter is responsible for indemnifying the insurance holder, in case of a significant future and uncertain risk occurrence.

The low probability of occurence and high severity are characteristics of the insurance contract, which should not be confused with the financial risk contract.

The financial risk is embedded in contracts that originate a financial asset for a counterpart against a financial liability for the other entity.

Insurance risk

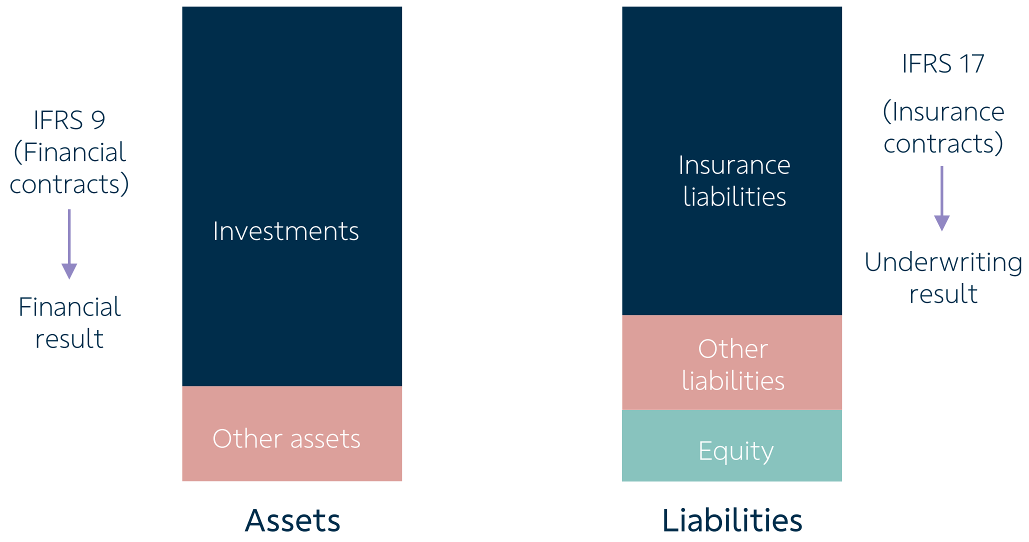
- Death or survival/longevity
- Illness and disability
- Loss of goods due to damage or theft
- Default of a payment due
- A possible change in non-financial variable that is specific to a party of the contract

Financial risk

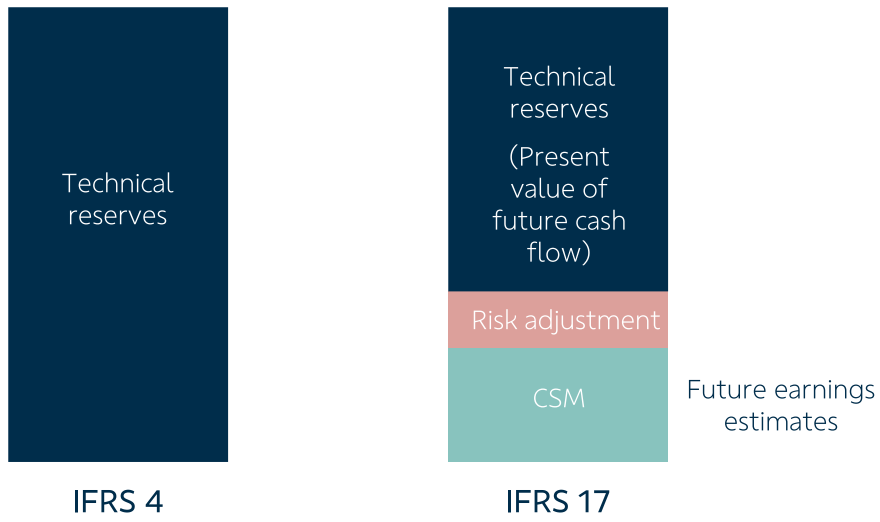
The risk of future change in one of the following variables:

- Interest rate
- Market price of financial assets
- Commodities price
- Forex rate
- Inflation
- Credit rating
- Any other financial variable not covered by insurance contracts

Simplified balance sheet



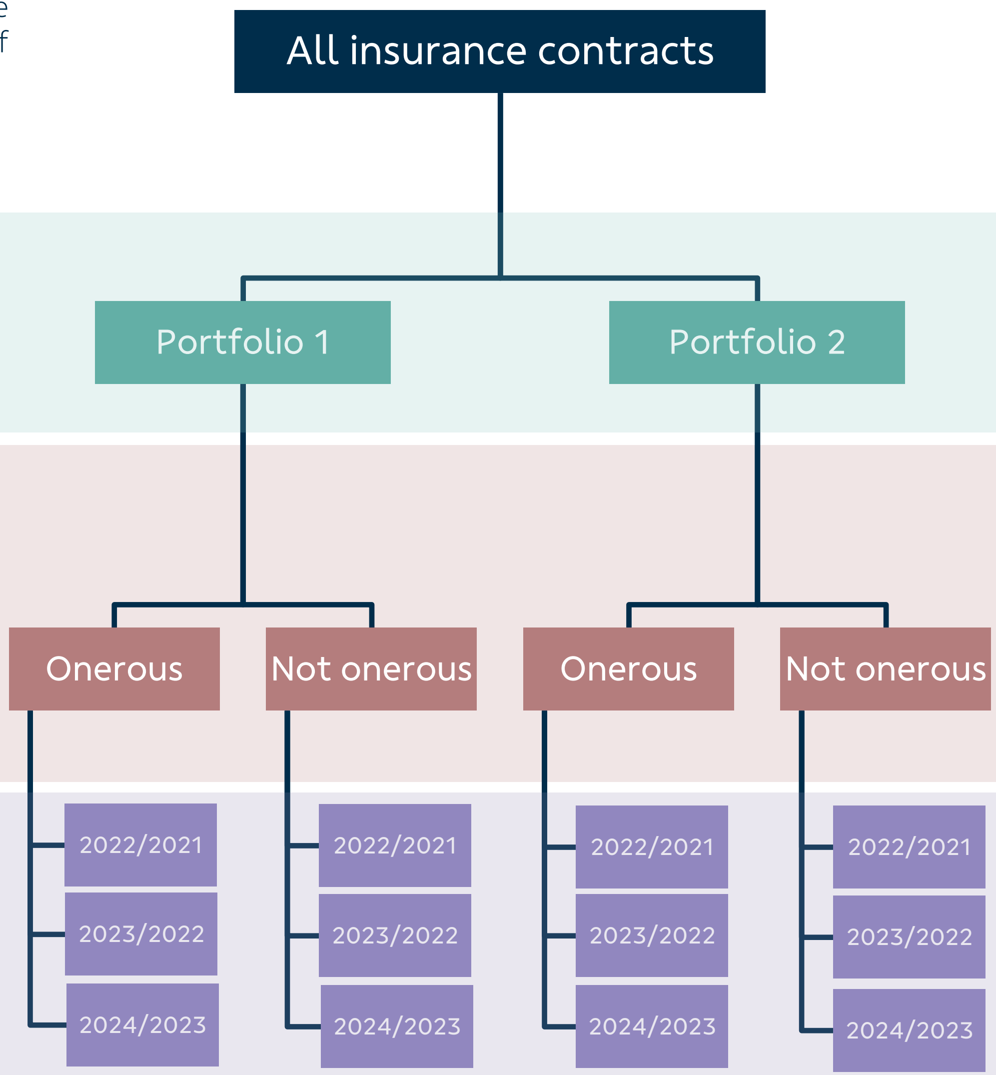
Breakdown of insurance liabilities (IFRS 4 vs. IFRS 17)



General concepts

Aggregation of the contracts

It is necessary in the initial recognition of all the insurance contract within the IFRS 17 in order to avoid the compensation of unprofitable contracts by the profitable ones. Find below a figure on the levels of aggregation provided by IFRS 17:



1 Portfolio

- Similar insurance risks
- Jointly managed risks

2 Group

- **Onerous** – onerous contracts at initial recognition, if any
- **Not onerous**
  - contracts with no significant possibility of becoming onerous after initial recognition
  - remaining contracts

3 Harvest

- Up to 1-year

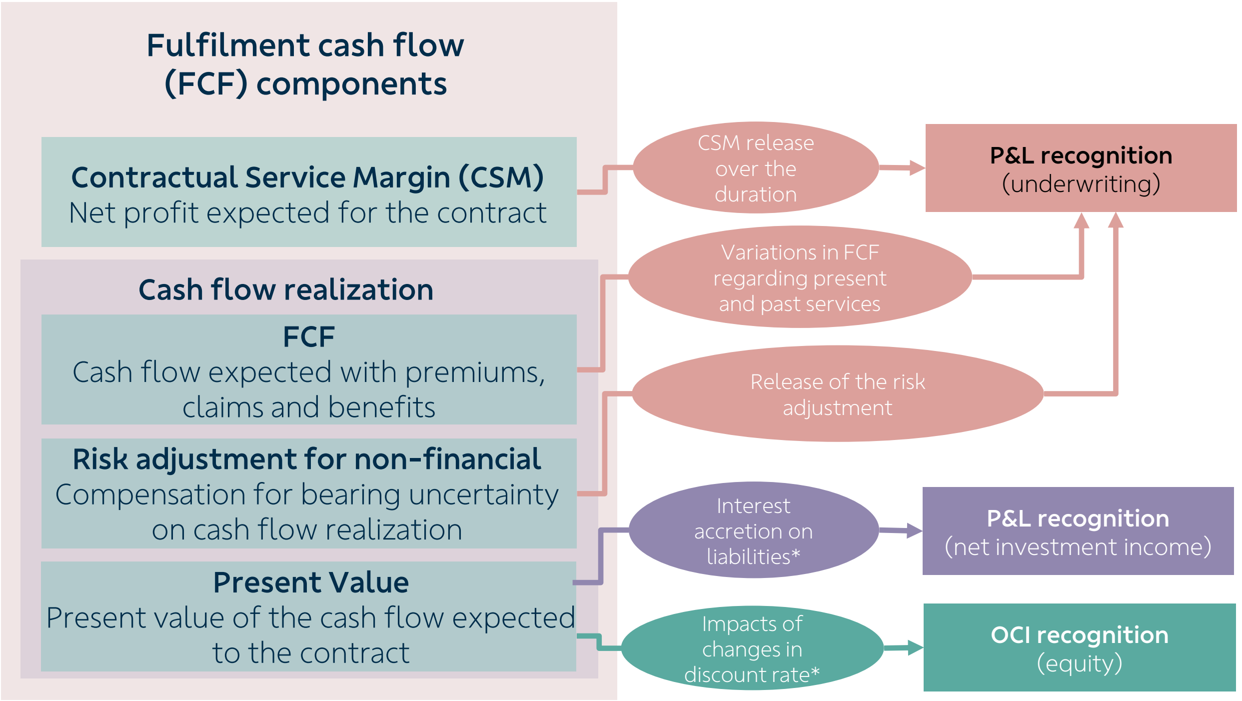
Aggregation of contracts – Brasilprev and Brasilseg

	PENSION PLANS					INSURANCE		
1 Portfolio	Defined benefit	PGBL/VGBL	Risk coverage	VGBL hybrid	Reinsurance	Annual risk		Multiannual Risk
2 Group	Onerous contracts at initial recognition	Remaining contracts				Onerous contracts at initial recognition	Remaining contracts	Remaining contracts
3 Harvest	Up to 12-months apart the beginning of coverage of the first and last contract of the harvest					Each portfolio is divided into annual cuts		

General Measurement Model | BBA - *Building Block Approach*

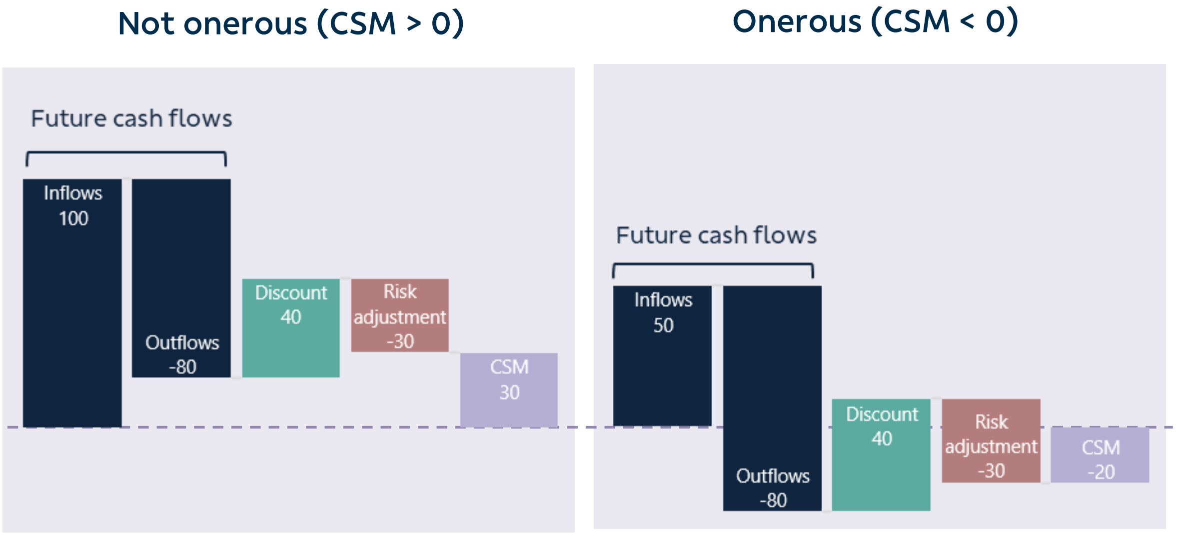
Initial recognition

At the initial recognition, the company estimates the **fulfilment cash flow** and establishes the **contractual service margin**, which is further recognized throughout the coverage term.



*The discount rate used at the initial recognition of CSM or locked-in rate (LIR). The MtM of liabilities related to any difference between LIR and the discount rate at the subsequent measure is accounted for in other comprehensive income (OCI).

Example of contracts*



* Ilustrative numbers

Subsequent measurement

After initial recognition, the liability (balance sheet) of a group of insurance contracts is constituted, comprising:

Liability for remaining coverage (LRC)

FCF related to the coverage of future risk
+
CSM to be recognized (deferred profits)

+

Liability for incurred claims (LIC)

FCF of claims and related expenses incurred

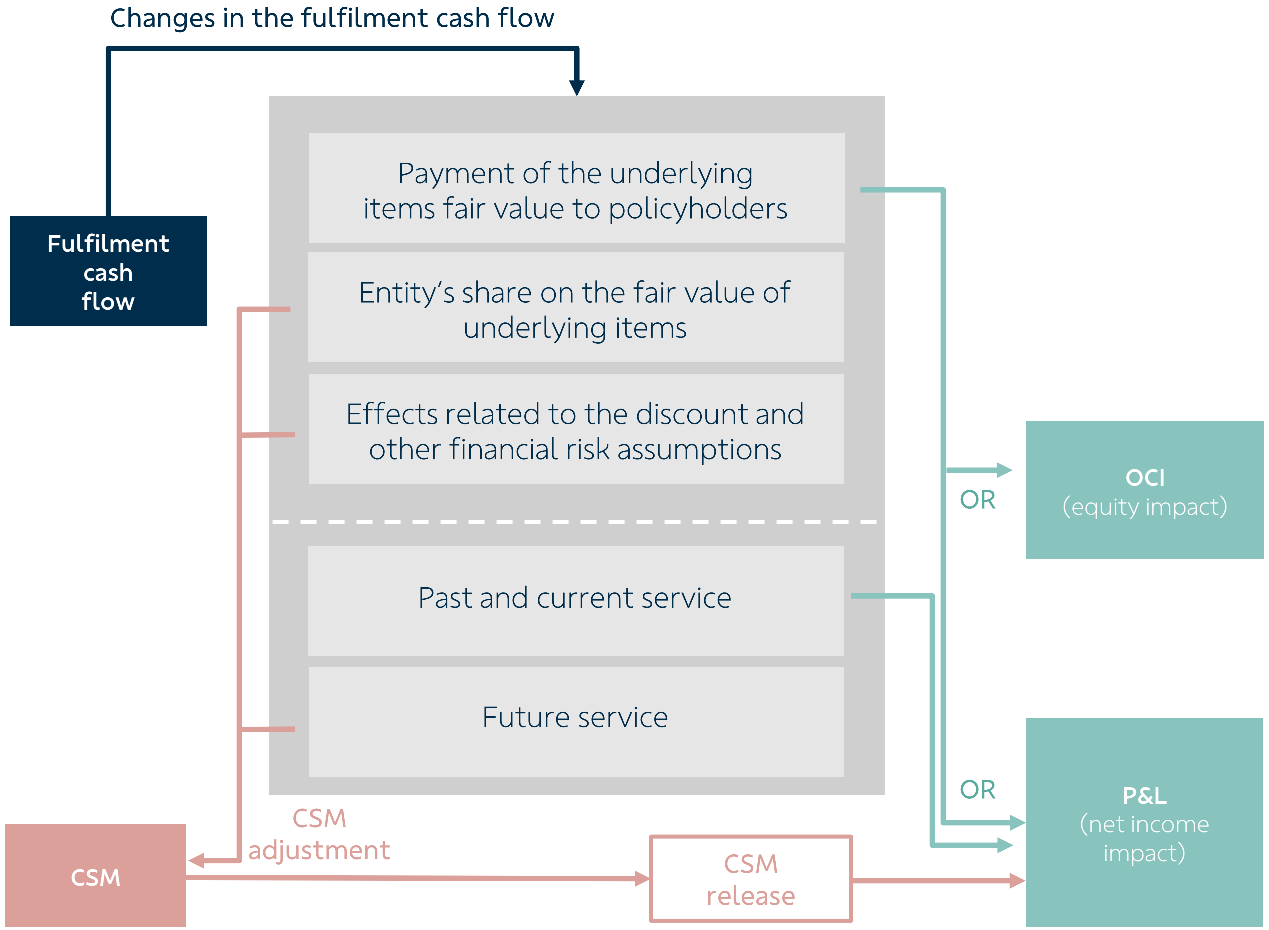
VFA – *Variable Fee Approach*

The variable fee approach follows the same rules of BBA model. The difference is the variable remuneration component in the FCF.

In general, VFA modifies the treatment of CSM within the subsequent measurement, comprising the direct participation features, meaning the contracts in which the policyholder participates in a share of a clearly identified pool of underlying items (e.g. asset portfolio).

The subsequent measurement considers that the insurance company provides services related to asset management, being remunerated with a fee on the total balance of underlying items (assets).

Insurance obligation = Payment of the underlying items fair value − Variable fee



PAA – *Premium Allocation Approach*

Simplified model pretty much similar to the former accounting standard (IFRS 4), which is based on the linear recognition of premiums.

The PAA may be used for short term contracts (less than 12-months) or those contracts in which the remaining coverage provision is not that different compared to the liabilities measured in the BBA model.

Initial recognition

The initial measurement does not explicitly identify the presente value of the fulfilment cash flow, the risk adjusmtent and the financial component.

In this sense, the **liability for remaining coverage** is recognized on a premiums received base.

$$\textbf{Initial remaining coverage liability} = \text{Premiums Received} - \text{Cash flow of acquisition costs}$$

Cash flow of acquisition costs

Related to sale and underwriting of a group of insurance contracts, being directly allocated to the group to which they belong.

The cash flow of acquisition costs are related to:

- commercial staff and partners; and
- direct and part of indirect costs related to the contracts origination.

In PAA model the company can opt to recognizing the acquisition costs at the moment of cash outflow.

Subsequent measurement

Considering that in PAA the company does not calculate the present value of fulfilment cash flow and risk adjustment, it is not necessary to reassessing the components before the claims occurrence as in PAA the assumption is that it will not have significant changes in this components.

$$\textbf{Liability for remaining coverage} = \underbrace{\text{Premiums received} - \text{Cash flow of acquisition costs}}_{\text{Current period}} \;(+/-)\; \text{Assets and liabilities initially recognized}$$

Attributable and Non-Attributable Costs

Regardless of the measurement model adopted, IFRS 17 establishes the measurement of fulfilment cash flow, which includes estimates of expected inflows and outflows. On the outflow perspective, costs must be classified into attributable and non-attributable to the contracts, for later identification and allocation to the groups to which they are related.

Costs

- **Attributable**
  Costs related to insurance contracts
  - **Acquistion cost cash flow**
    Commissions and other direct and indirect costs related to sales
  - **Incurred claims**
    Claims analysis and payment: lawyer fee, payment processing and other
  - **G&A**
    Fixed and variable expenses directly related to the insurance contract: staff, IT, rental, trips (e.g. commercial team) etc.
- **Non-Attributable**
  Costs not related to insurance contracts
  - **Expenses not directly related to the contract and/or customer**
    Marketing, personnel, trips etc.

Measurement Models Adopted by BBSE Investees

#Pública

	General model (BBA)	Simplified model (PAA)	Variable fee model (VFA)
	Standard model	Indicated for short term contracts (up to 1-year) or for contracts in which the remaining coverage liability is pretty similar to the value calculated in BBA	Standard model for contracts with underlying return components
Brasilseg	**Credit life and mortgage life**	**Others**	**-**
Brasilprev **All the contracts are long-term**	**Traditional (defined benefit), risk coverage, hybrid VGBL and reinsurance**	**-**	**PGBL/VGBL (defined contribution)**

Discount Rate – Definition and Application

Definition

The fulfilment cash flow is discounted to reflect the financial value of time. The discount rate shall be consistent with market prices and reflect the characteristics of the cash flow and liquidity. It can be used two approaches to establish the discount rate:

- ✓ Top-Down: the discount rate is derived from the Internal Rate of Return (IRR) of a portfolio of assets;
- ✓ Bottom-Up: the calculation of the discount rate is based on a risk-free rate.

The table below shows the application of discount rates in measuring the components of the fulfillment cash flow.

Measurement aspects	Applied rate
Fulfillment cash flow	Current discount rate
Adjustments in the CSM for changes in fulfillment cash flows for direct participation contracts that do not vary based on the returns of underlying items, excluding the change in the effect of time value of money and financial risks	
Accretion of interest on CSM for contracts without direct participation characteristics	LIR (Locked-in rate): discount rate applied to future cash flows at the time of initial recognition of the group of contracts
CSM adjustments for changes in fulfillment cash flows for contracts without direct participation features	
For PAA, the liability for adjusting the remaining coverage to the time value of money	

IFRS 17 provides the option of recognizing the market variation of Liabilities (MtM) in result (P&L) or OCI.

Brasilseg

Discount rate:

PAA approach

Liability for remaining coverage: as permitted by the rule, the company will not adjust the time value of money and the effect of financial risk, considering that these are short-term contracts.

Liability for incurred claims: risk-free rate

BBA approach

Risk-free forward yield curve used to reflect the time value of money related to insurance liabilities (remaining coverage and incurred claims), considering the cash flows adjusted by the estimated inflation.

Brasilprev

BBA | VFA approaches

(+) Fwd Yield Curve Susep

(+) Liquidity Premium (ILP)

- (+) Credit risk
- (–) Nominal Yield Curve
- (–) Defaul probability

✖ Adjustment factor of liquidity premium (Liability).

Brasilseg and Brasilprev decided to recognize the MtM effects related to the difference between LIR and current discount rate in OCI, aiming to reduce P&L volatility.

Risk Adjustment – Definition and Application

Definition

The non-financial risk adjustment evidences the value charged by the insurer to handle the uncertainty on the amount of inflows/outflows embedded in fulfillment cash flow and their moment of occurrence. In this sense, the risk adjustment reflects the company's own perception of risk aversion.

In general, the non-financial risk comprises the underwriting risk that the insurance contracts are exposed to, representing a measure of deviations on the projections for the following variables: pricing risk; longevity risk; mortality risk; and cancellation risk.

The capital allocated to risk adjustment is directly related to the type of events insured by the company.

The insurer uses the adjustment for non-financial risk to measure the groups of insurance contracts, both at the initial and the subsequent recognition.

Brasilseg

The analysis were held splitting life and non-life risks and using the tests made by the International Association of Insurance Supervisors (IAIS).

Brasilprev

Mortality: estimated using the historical withdrawals, incurred claims and reversal of provisions for annuity payments related to death.

Longevity: percentage of actuarial table BR-EMS2021 and assumption of normal distribution of mortality according to Brasilprev's own experience.

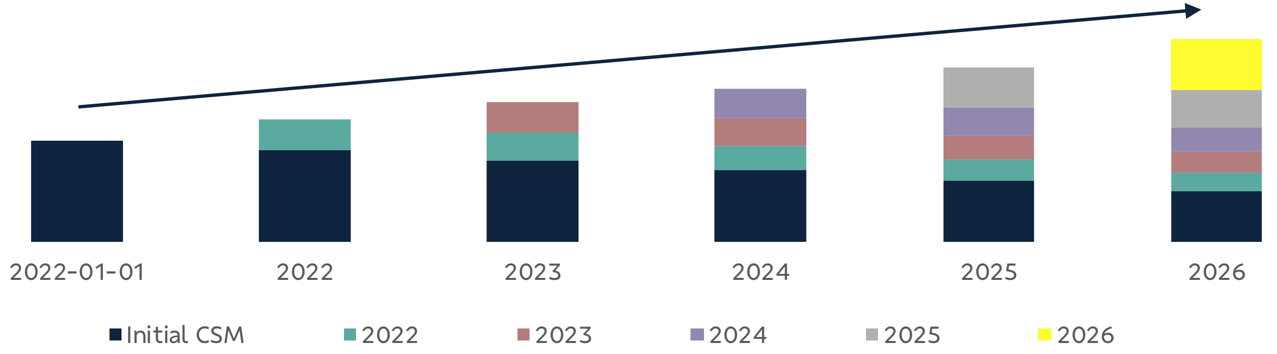
CSM (applicable to BBA and VFA)

Definition

The CSM represents the earnings to be recognized in the P&L throughout the risk duration within the groups and insurance contracts. At the initial recognition, the CSM shall be calculated in order to assess whether a contract is onerous or not. The onerouness of a contract must be immediatly recognized in the P&L and the CSM provision will be zero.

Changes in CSM balance

Illustrative dynamic of CSM evolution



CSM balance (end-period)

=

Initial CSM

\+ New contracts effects

+/− Company's participation in the underlying items (VFA)

\+ Interest accretion on CSM

+/− Changes in fulfillment cash flow related to future services

+/− Forex effects on CSM

− CSM released to P&L

Main Variables of Insurance Contracts Movements – Liability for Remaining Coverage

Movements in the liability for remaining coverage – Brasilseg

	Initial recognition / balance	Details	FCF	Risk adjusment	CSM
UNDERWRITING RESULT	Model correction	Adjustments related to model corrections	X	X	X
	Model refine	Adjustments related to model refine	X	X	X
	New businesses	Present value of new businesses cash flow (revenues – expenses)	X	X	X
	Claims expected	Claims projected at "t-1" deducted the fulfillment cash flow at "t"	X	--	--
	Non-financial risk adjustment release	Release of non-financial risk adjustment related to elapsed risk	--	X	--
	CSM release	Release of CSM related to elapsed risk	--	--	X
	Interest accretion	Interest accretion on liabilities	X	X	X
	Assumptions update	Present value of assumptions update	X	X	X
	Adjustment for experience	Deviation between estimed premiums and commissions versus the effective amounts received/paid. When negative it means that the amount received was below the projections. It is also allocated here the deviations in cancellations.	X	--	X
	Cash flow	Premiums received, commission paid and premiums reimbursed (cancellation)	X	X	--
OCI (EQUITY)	OCI adjustment	Difference between current discount rate and the LIR (discount rate used in the initial measurement)	X	X	--
	Final balance				

Movements in the liability for remaining coverage – Brasilprev

	Initial recognition / balance		FCF	Risk adjustment	CSM
UNDERWRITING RESULT	CSM release		--	--	X
	Non-financial risk adjustment release		--	X	--
	Adjustment for experience		X	--	--
	New businesses recognition		X	X	X
	Assumptions update		X	X	X
	Estimated losses update		X	X	--
	Incurred claims adjustments		X	X	--
	Insurance financial expenses		X	X	X
	Cash flow		X	X	--
OCI (EQUITY)	OCI adjustment		X	X	--
	Final balance				

Source: Brasilseg and Brasilprev

Main Variables of Insurance Contracts Movements – Liabilities for Claims

Movements in liabilities for incurred claims – Brasilseg

	Initial recognition / balance	Details	FCF	Risk adjusment
UNDERWRITING RESULT	Model correction	Adjustments due to model correction	X	X
	Model refine	Adjustments due to model refine	X	X
	Interest accretion	Interest accretion on liability	X	X
	Risk release	Release of non-financial risk adjustment related to elapsed risk	--	X
	Assumptions update	Present value of cash flow related to assumption changes	X	X
	Experience adjustment	Variation of provisions for claims added the difference between claims projected and realized	X	--
	Cash flow	Claims and related expenses paid	X	--
OCI (EQUITY)	OCI adjustment	Difference between current discount rate and the LIR (discount rate used in the initial measurement)	X	X
	Final balance			

Movements in liabilities for incurred claims – Brasilprev

	Initial recognition / balance		FCF	Risk adjustment
UNDERWRITING RESULT	Risk adjustment release		--	--
	Experience adjustment		X	--
	Incurred claims adjustment		X	X
	Assumptions update		X	X
	Loss componente update		X	X
	Insurance financial expenses		X	X
	Cash flow		X	--
OCI (EQUITY)	OCI adjustment		X	X
	Final balance			

Source: Brasilseg and Brasilprev

Transition – Definition and Application

Within the transition to IFRS 17 the company shall apply the new standards in a retrospective way, publishing the transition balance sheet which represents the period immediately prior to the effective date of the new standard. Below are the possible transition models and the approaches adopted by Brasilseg and Brasilprev:

	Complete	Modified	Fair Value
	Identify, recognize and measure each group of insurance contracts as if IFRS 17 had always applied. The contracts shall be recalculated since the effective date of the new standards, and all balances not existing if IFRS 17 had always applied must be derecognized.	It shall produce similar result as compared to the complete approach, with a few simplifications. The contracts shall be recalculated from a set of available information, without excessive cost or effort.	The objective is to determine the CSM or loss component from the difference between the fair value of a group of contracts and their cash flows measured on the transition date.
Brasilseg	**Term life, home, rural, commercial lines and other**	-	**Credit life and mortgage life**
Brasilprev	-	**PGBL, VGBL, Traditional, VGBL hybrid and Risk product** Transition date: December 2020	-

Accounting example

Accounting Example | BBA

For education purposes, an example of accounting for a group of insurance contracts using the general measurement model (BBA) is presented below:

Assumptions:

1. **Premiums written:** R$2,000 – received in cash
2. **Period of coverage:** 3 years
3. **Acquisition costs:** R$200 – paid in cash
4. **Expected claims:** R$300 per year of coverage
5. **Attributable expenses:** R$50 per year of coverage
6. **CSM release:**
   Year 1: 40%; Year 2: 30% and Year 3: 30%
8. **Experience adjustment:** incurred claims of R$350 in Year 2, revision for Year 3 of +R$50
9. **Does not consider discount rate**

Initial cash flow	Initial	Year 1	Year 2	Year 3	Total
Premiums written (A)	2,000		-	-	**2,000**
Acquisition cost (B)	(200)		-	-	**(200)**
Expected claims (C)		(300)	(300)	(300)	**(900)**
Attributable costs (D)		(50)	(50)	(50)	**(150)**
Present value of cash flows (E)					**750**
(=) CSM (F)					750
CSM release		*40%*	*30%*	*30%*	

Balance sheet| Initial measurement

Assets		Liabilities	
Cash and equivalent cash	**1,800**	**Liability for coverage**	**1,800**
Recevied premiums (A)	2,000	Present value of fulfiment cash flow (C+D)	1,050
Acquisition cost paid (B)	(200)	CSM (F)	750
Total	1,800	Total	1,800

Balance sheet| Subsequent measurement

Assets	Year 1	Liabilities	Year 1
Cash and equivalent cash	**1,450**	**Liability for remaining coverage**	**1,150**
(+) Initial balance	1,800	Present value of fulfiment cash flow	700
(-) Incurred claims	(300)	(+) Initial balance	1,050
(-) Attributable costs	(50)	(-) Expected expenses release	(350)
		CSM	450
		(+) Initial balance	750
		(-) CSM release	(300)
		Equity	**300**
		Retained earnings	300
Total	1,450	Total	1,450

Assets	Year 2	Liabilities	Year 2
Cash and equivalent cash	**1,050**	**Liability for remaining coverage**	**575**
(+) Initial balance	1,450	Present value of fulfiment cash flow	400
(-) Incurred claims	(350)	(+) Initial balance	700
(-) Attributable costs	(50)	(-) Expected expenses release	(350)
		Experience adjustment	50
		CSM	175
		(+) Initial balance	450
		(-) CSM release	(225)
		(-) Experience adjustment	(50)
		Equity	**475**
		Retained earnings	475
Total	1,050	Total	1,050

Assets	Year 3	Liabilities	Year 3
Cash and equivalent cash	**650**	**Liability for remaining coverage**	**-**
(+) Initial balance	1,050	Present value of fulfiment cash flow	-
(-) Incurred claims	(350)	(+) Initial balance	400
(-) Attributable costs	(50)	(-) Expected expenses release	(400)
		CSM	-
		(+) Initial balance	175
		(-) CSM release	(175)
		Equity	**650**
		Retained earnings	650
Total	650	Total	650

Accounting Example | BBA

Dynamics in the P&L for the 3 years:

Income statement	Year 1	Year 2	Year 3
Insurance results	**650**	**575**	**575**
CSM release	300	225	175
% CSM initial balance	*40%*	*30%*	*30%*
Expected expenses release	350	350	400
Claims	300	300	350
Attributable costs	50	50	50
Realized expenses	**(350)**	**(400)**	**(400)**
Incurred claims	(300)	(350)	(350)
Attributable costs	(50)	(50)	(50)
Insurance margin	**300**	**175**	**175**

Accounting example | PAA

Below, an example of accouting for a group of insurance contracts using the simplified model (PAA)

Assumptions:

1. **Premiums written:** R$2,000 – received in cash
2. **Period of coverage:** 07-01-2021 to 06-30-2022
3. **Acqusition cost:** R$200 – paid in cash and deferred by the period of coverage
4. **Incurred claims** R$300 after 6 months and R$200 after 9 months of coverage
5. **Does not consider the time value of money adjustment**

Income statement	6M	9M	12M
Insurance revenues	**1,000**	**1,500**	**2,000**
Premiums release[1 2]	900	1,350	1,800
Acquisition costs release[2]	100	150	200
Insurance expenses	**(400)**	**(650)**	**(700)**
Incurred claims	(300)	(500)	(500)
Acquisition costs expenses[2]	(100)	(150)	(200)
Insurance margin	600	850	1,300

Balance sheet

Assets	Initial	6M	9M	12M
Cash and equivalent cash	**1,800**	**1,800**	**1,800**	**1,800**
(+) Initial balance	-	1,800	1,800	1,800
(+) Premiums received	2,000	-	-	-
(–) Acquisition cost	(200)	-	-	-
Total	1,800	1,800	1,800	1,800

Liabilities	Initial	6M	9M	12M
Liabilities	**1,800**	**1,200**	**950**	**500**
Liability for remaining coverage	1,800	900	450	-
(+) Initial balance	-	1,800	1,800	1,800
(+) Premiums release	-	(900)	(1,350)	(1,800)
Provision for incurred claims	-	300	500	500
Equity	**-**	**600**	**850**	**1,300**
Retained earnings	-	600	850	1,300
Total	1,800	1,800	1,800	1,800

[1] Premiums received – acquisition cost
[2] Release related to the period incurred