

Market-Consistent Embedded Value Report

31 December 2019

## **SUMMARY**

#### 1 INTRODUCTION

1.1	Preparation bases & Key principles	6
1.2	Content and perimeter	7

## 2

#### GROUP RESULTS AT 31 DECEMBER 2019

2.1	Introduction	10
2.1.1	Main events in the year	10
2.1.2	Overall results	11
2.2	Value of New Business	12
2.3.	MCEV at 31 December 2019	15
2.3.1	Adjusted Net Asset Value	16
2.3.2	Analysis of change in MCEV	17
2.3.3	Analysis of change in Free Surplus	19
2.4	Implied Discount Rate	20
2.5	Sensitivities	21

## 3

#### RESULTS DETAILED BY GEOGRAPHIC AREA

3.1	Overview	25
3.2	France	27
3.2.1	Value of New Business	27
3.2.2	MCEV at 31 December 2019	29
3.3	Latin America	32
3.3.1	Value of New Business	32
3.3.2	MCEV at 31 December 2019	34
3.4	Europe excluding France	36
3.4.1	Value of New Business	36
3.4.2	MCEV at 31 December 2019	38



#### METHOD

4.1	Adjusted Net Asset Value	42
4.1.1	Required Capital	42
4.1.2	Free Surplus	42
4.2	Value of In-Force (VIF)	43
4.2.1	Present Value of Future Profits (PVFP)	43
4.2.2	Time Value of Options and Guarantees TVOG)	43
4.2.3	Frictional Cost of Required Capital (FCRC)	44
4.2.4	Cost of Residual Non-hedgeable Risks (CRNHR)	44
4.3	Value of New Business (VNB)	45
4.3.1	Definition of New Business	45
4.3.2	Valuation Method	45

## 5

#### ASSUMPTIONS

5.1	Economic Assumptions	48
5.1.1	Interest rate reference curve	48
5.1.2	Calibrating the rate model	49
5.1.3	Calibrating the equity model	50
5.1.4	Calibrating the other diversified index	50
5.1.5	Calibrating the corporate credit spread model	50
5.1.6	Exchange rate	51
5.1.7	Tax rate	51
5.1.8	Cost of capital allocated to	
	residual non-hedgeable risks	51
5.1.9	Subordinated Securities finance rate	51
5.2	Non economic Assumptions	52
5.2.1	Expenses assumptions	52
5.2.2	Claims and persistence assumptions	52
5.2.3	Future management decisions	52

6

#### CHANGES IN MCEV SINCE 2014

6.1 V	/NB history	55
6.2 N	MCEV history	56

7

EXTERNAL OPINION ON MARKET-CONSISTENT EMBEDDED VALUE

8

#### APPENDICES

Appendix A: Glossary	62
Appendix B: Perimeter	64

59



## Introduction

1

6

7

1.1 Preparation bases & Key principles1.2 Content and perimeter

## **1.1 PREPARATION BASES & KEY PRINCIPLES**

#### Presentation of the report

This report presents the results, methods and assumptions used to determine the Embedded Value of the CNP Assurances Group (the "Group") at 31 December 2019. The Embedded Value (referred to variously by the terms "Market- Consistent Embedded Value", "MCEV", "Embedded Value" or "EV") is established in accordance with the "European Insurance CFO Forum Market-Consistent Embedded Value© Principles" (the "MCEV principles") published in June 2008, amended in October 2009 then updated in April 2016.

The report contains a reconciliation between the Group's IFRS equity and the Group's EV at 31 December 2019. However, the information contained in this report is not directly comparable to the financial information produced in accordance with the IFRS standards. Nor it is a valuation of the Group or of a part of the Group as might be established in the context of an acquisition: other valuation methods could then be used.

The Group nevertheless considers that the information on Embedded Value is such as to provide valuable components to analyse the Group's economic performance in the financial year. The different terms used in this report to analyse the Group's activities may differ from the definition used by other insurance companies or groups. A glossary at the end of the document (Appendix A) gives details on the definition of the main terms used in this report.

The methodology, assumptions and results of the 2019 MCEV have been reviewed jointly by auditors PwC and Mazars, which also audit CNP Assurances's financial reports and whose opinion is appended at the end of the report.

#### **Presentation of MCEV**

The Market-Consistent Embedded Value is a measure of the economic value of life insurance activities and related activities, on the basis of a fair value valuation of assets and liabilities. It comprises on the one hand the adjusted value of shareholders' equity and on the other hand the value of the portfolio of policies at the financial year-end. This last component is estimated using projection models and is the present value of future distributable profits after making sufficient allowance for risks and constraints related to insurance activities in a marketconsistent financial environment. In particular, it takes into account:

- the cost of Time Value of Options and Financial Guarantees given to policyholders ("TVOG") in addition to their embedded value;
- the Frictional Cost of Required Capital ("FCRC"), arising from the obligation to permanently maintain the Required Capital;
- the Cost of Residual Non-hedgeable Risks not fully valued elsewhere (CRNHR).

The Adjusted Net Asset Value ( "ANAV") breaks down into Required Capital and Free Surplus. The Required Capital is the market value of the assets that the insurer must hold in respect of its business, whose distribution to shareholders is restricted. The Free Surplus refers to the surpluses available. The "Operating Free Cash-Flow" indicator (OFCF) shows the release of Free Surplus related to operating activities. This release can be used to pay dividends and develop business via marketing New Business or through external growth operations.

The contribution to MCEV from new policies in the current year (referred to variously by the terms "Value of New Business" or "VNB") is analysed specifically, and is a measure of the performance of the Group's underwriting activity.

The MCEV and VNB are calculated net of minority interests, net of reinsurance and net of tax.

## **1.2 CONTENT AND PERIMETER**

#### Description of the report

This report presents the results, methods and assumptions used to calculate the Group's Embedded Value and prepare information on Embedded Value at 31 December 2019. It is structured around the following sections:

Section 1	: Preparation bases & key principles
Section 2	: Group results at 31 December 2019
Section 3	: Results detailed by geographic area
Section 4	: Methodology
Section 5	: Assumptions
Section 6	: Changes in MCEV since 2014
Section 7	: Opinion externe sur l'Embedded Value
Appendic	es

#### Scope

The Group's business is concentrated on life insurance in the three geographic areas: France, Latin America and Europe excluding France. The main products are:

- individual traditional Savings and unit linked accounts;
- capital accumulation products;
- pension products including immediate and deferred annuities;
- credit Insurance (Consumer Credit and Mortgage);
- protection and health products;
- other products linked to the above products.

The business covered by MCEV concerns all Group entities' life insurance business and related business that contributes significantly to the value. The scope covered and changes to it compared to the MCEV scope at 31 December 2018 are detailed in Appendix B.



# 2

# Results at 31 December 2019

2.1	Introduction	10
2.1.1	Main events in the year	10
2.1.2	Overall results	11
2.2	Value of New Business	12
2.3.	MCEV at 31 December 2019	15
2.3.1	Adjusted Net Asset Value	16
2.3.2	Analysis of change in MCEV	17
2.3.3	Analysis of change in Free Surplus	19
2.4	Implied Discount Rate	20
2.5	Sensitivities	21

## **2.1 INTRODUCTION**

#### 2.1.1 Main events in the year

2019 was marked by several major events:

#### Rates stuck in negative territory in the euro zone

The low rate environment in the euro zone has a significant impact on the profitability of Savings-Pensions business, and consequently on the value of MCEV metrics. The environment is partly offset by the results on sales strategy (pricing and product design) and expenses monitoring.

Following rates stuck in negative territory, CNP Assurances has adapted its financial strategy and to be consistent its future management decisions in modelling. Modelling tools have also been adjusted to better reflect reality.

#### 100% acquisition of the Cypriot subsidiary

CNP Assurances has strengthened its presence in the Cypriot market following the acquisition from Bank of Cyprus of the remaining 49.9 % stake in CNP Cyprus Insurance Holdings, a 50.1 % subsidiary of CNP Assurances since the end of 2008. The acquisition price comes to € 97.5 M and was financed by CNP Assurances with its own resources in October 2019.

## The conclusion of an amendment to the framework agreement in Brazil

CNP Assurances has completed its discussions with Caixa Seguridade concerning their new exclusive distribution agreement in the Caixa Econômica Federal network in Brazil by signing on 20 September 2019 an amendment to the 29 August 2018 framework agreement. The amendment enables CNP Assurances to benefit from a 5-year extension of the exclusive distribution agreement, or until 13 February 2046 (versus the original expiry date of 13 February). The amendment also makes changes to the date on which the economic share changes. The current share of 51.75 % is maintained until December 2020 and will be 40 % thereafter. In December 2020, CNP Assurances will pay an amount that has been increased from R\$ 4.65 billion to R\$ 7.0 billion.

#### 2.1.2 Overall results

The value of the Group's New Business came to +  $\in$  543 M in 2019, down - 17.6 % or -  $\in$  116 M (- 16.6 % at constant exchange rate, or -  $\in$  109 M). The decrease in VNB is mainly driven by France ( $\in$  263 M, 36.4 %) and is due to the lower rates despite a positive operational contribution. It is important to note an increase in VNB (Value of New Business) in Latin America (+  $\in$  28 M) mainly due to favourable volume effect in the Pensions and Risk / Protection segments. VNB is also up in Europe excluding France (+  $\in$  7 M) due to the increase in profitability in the Risk / Protection segment despite an unfavourable volume effect in the Unit-Linked segment.

The Group's Embedded Value comes to  $+ \in 20,562$  M, or a decrease of  $- \in 1,300$  M (- 6 %) over the period including  $- \in 590$  M for opening adjustments detailed in section 2.3.2,  $+ \in 2,188$  M for the operational contribution,  $- \in 3,001$  M for economic effects excluding exchange rates, +  $\in$  168 M due to the decrease in corporation tax rates, -  $\in$  65 M due to foreign exchange rate.

The main vectors for the change in VNB and MCEV are given in the following sections, and components detailed by geographic area are given in Section 3 of the report.

#### The following table gives the main results in terms of VNB and MCEV:

(€M, %)		2019	2018
VNB	Value of New Business	543	659
APE	Annual Premium Equivalent	3,186	3,090
PVNBP	Present Value of New Business Premiums	26,829	26,126
	Margin rate	17.1 %	21.3 %
	PVNBP ratio	2.0 %	2.5 %

(€M, %)		2019	2018
MCEV	Market-Consistent EMBEDDED VALUE	20,562	21,862
VIF	Value of In-Force	6,921	9,261
ANAV	Adjusted Net Asset Value	13,641	12,600
	Return on MCEV	10.3 %	7.9 %
IDR	Implied Discount Rate	9.7 %	7.5 %
OFCF	OPERATING FREE CASH FLOW	2,402	1,462
Of which subordinated debt <sup>(1)</sup>		1,052	0

(1) Subordinated debts issued during the financial year, net of return

## **2.2 VALUE OF NEW BUSINESS**

The following table gives a detailed breakdown of Group VNB. VNB is valued using a marginal method that takes account of interactions between new products and stock of existing contracts (see Section 4.3.2). It is valued on the basis of assumptions reviewed at the year-end, after including taxes and minority shareholdings.

		2019		2018		Change	
		€M	€ per share¹	€M	€ per share¹	€M	
PVFP	Present Value of Future Profits	935	1.4	933	1.4	2	0.2 %
TVOG	Time Value of Options and Guarantees	(222)	(O.3)	(154)	(0.2)	(68)	44.4 %
FCRC	Frictional Cost of Required Capital	(23)	(O.O)	(18)	(O.O)	(5)	25.5 %
CRNHR	Cost of Non-Hedgeable Risks	(146)	(0.2)	(102)	(O. <u>1</u> )	(45)	44.2 %
VNB	Value of New Business	543	0.8	659	1.0	(116)	(17.6 %)
APE	Annual Premium Equivalent		3,186		3,090	95	3.1 %
PVNBP	Present Value of New Business Premiums		26,829		26,126	702	2.7 %
	Margin rate		17.1 %		21.3 %	(4.3 %)	(20.0 %)
	PVNBP ratio		2.0 %		2.5 %	(0.5 %)	(19.7 %)

<sup>1</sup> Number of shares at 31 December 2018 and at 31 December 2019: 686,618,477

#### The group VNB is down - € 116 M (- 17.6 %). The decrease is due to changes in the following components:

- The Present Value of Future Profits (PVFP) is stable (+ 0.2 %) compared to 2018. This is mainly due to the volumes increase in Latin America and improvement in claims experience and product mix in Europe in the Credit Insurance segment which offset the fall in value in the Savings / Pensions segments in Europe, due to the deterioration in the financial margin and review of surrenders assumptions.
- The Time Value of Options and Guarantees (TVOG) is up + 44.4 % because of the deterioration in market conditions due to the sharp fall in rates which increase, in a growing number of scenarios, the cost of capital guarantee.
- The Frictional Cost of Required Capital (FCRC) is up + 25.5 % in line with the update of the Solvency 2 Required Capital.
- The Cost of Residual Non-Hedgeable Risks (CRNHR) is up
   44.2 % due to upward review of cost of capital on operational and surrenders risks.

#### The Group APE volume (€ 3,186 M) is up 3 % compared to 2018, due to:

- higher sales in France on the Euro Savings (+ 4 %) and Credit Insurance (+ 13 %) segments, offset by a fall in sales in the Unit-Linked Savings segment (- 7 %);
- sales sharply up on the Latin America perimeter (+ 20.6 % at constant exchange rate) mainly on the Pensions and Credit Insurance segments;
- lower sales in Europe excluding France, mainly on the Unit-Linked segment in Italy following termination of the marketing of the PIR product.

The Group's margin rate came to + 17.1 % in 2019 against + 21.3 % in 2018, down - 4.3 points. The fall in margin rate is essentially due to lower rates despite a positive operational contribution.

The following table gives a detailed analysis of the main factors in the change in Value of New Business:

(€M , %)	VNB	Change	Margin rate
Value of New Business 2018	659		21.3 %
Updated model and scope	682	23	21.7 %
Change in the APE volume	696	14	21.7 %
Change in the Segment Mix	710	14	22.1 %
Change in experience	736	26	23.0 %
Change in financial market conditions	530	(206)	16.5 %
Updated taxation	550	19	17.1 %
Change in the foreign exchange rate	543	(6)	17.1 %
Value of New Business 2019	543	(116)	17.1 %
Change	(116)		(4.3 %)

#### The VNB came to + € 543 M at end 2019 against + € 659 M in 2018, the main items explaining the change are as follows:

- Updated model and scope (+ € 23 M) is mainly related to the inclusion of gross loading guarantees on the Euro Savings products and N-1 actual sales on the Credit Insurance products, offsets by an upward review of cost of capital on operational and surrenders risks for France (+ € 11 M). The ongoing review of modelling on almost all products for Brazil (+ € 3 M), the inclusion of a liquidity premium on the rate curve (VA) in Italy (+ € 2.0 M) and the change to the 100 % holding for CNP Cyprus Insurance Holdings (+ € 3.4 M) also improve VNB.
- Change in the APE volume (+ € 14 M) basically represents the effects of change in the overall volume of premiums received by Group companies, without including changes in the distribution per segment and per product. The volumes taken into account are the APE volumes and are established from premiums written in accordance with local accounting standards.
- Change in the Segment Mix (+  $\in$  14 M) takes into account the difference in the distribution of sales between different segments. It is mainly caused by the favourable effect of the Country Mix.

The following table gives the duration of New Business:

- Change in experience (+ € 26 M) reflects the impacts from changes in non economic assumptions, basically assumptions on claims, behavioural assumptions and cost assumptions. It basically concerns the favourable effects of the development of gross loading guarantees on Euro Savings products and Product Mix on Credit Insurance products, counterbalanced by updated surrenders on Credit insurance in France and the rise in projected costs.
- Change in financial markets conditions (- € 206 M) reflects impacts from the fall in rates which increase, in an growing number of scenarios, the cost of capital guarantee on Euro Savings products, partially offset by the increase in equity market.
- Updated taxation (+ € 19 M) reflects mainly the increase in unrealized gains on the assets benefiting from reduced rates.
- Change in foreign exchange rate (-  $\in$  6 M) reflects changes in average exchange rates for the Brazil Real and Argentina Pesos against the Euro since the last VNB reference calculations.

Duration (years)	2019	2018
Savings & Pensions	14.3	15.7
Risk & Protection	6.2	6.5

## **2.3 MCEV AT 31 DECEMBER 2019**

The following table gives a breakdown of the various components of Group MCEV at 31 december 2019 and a comparison with the MCEV at 31 December 2018:

	MCEV 2019 before distribution of dividend 2019		MC after of div	MCEV 2018 after distribution of dividend 2018		Change before distribu- tion of dividend 2018		MCEV 2018 before distribution of dividend 2018	
	€M	€ per share *	€M	€ per share *	€M	%	€M	€ per share *	
ANAV – Adjusted Net Asset Value	13,641	19.9	11,990	17.5	1,651	14 %	12,600	18.4	
Required Capital	4,978	7.3	1,917	2.8	3,061	160 %	1,917	2.8	
Free Surplus	8,662	12.6	10,072	14.7	(1,410)	(14 %)	10, 683	15.6	
VIF – Value of In Force	6,921	10.1	9,261	13.5	(2,340)	(25 %)	9,261	13.5	
Present Value of Future Profits	13,768	20.1	13,552	19.7	217	2 %	13,552	19.7	
Time Value of Options & Guarantees	(4,590)	(6.7)	(3,144)	(4.6)	(1,446)	46 %	(3,144)	(4.6)	
Frictional Cost of Required Capital	(544)	(O.8)	(406)	(0.6)	(138)	34 %	(406)	(0.6)	
Cost of Residual Non-Hedgeable Risks	(1,713)	(2.5)	(740)	(1.1)	(974)	132 %	(740)	(1.1)	
MCEV - Market-Consistent Embedded Value	20,562	29.9	21,251	31.0	(689)	(3 %)	21,682	31.8	

\* Number of shares at 31 December 2018 and at 31 December 2019: 686,618,477

The MCEV consists of (i) Adjusted Net Asset Value ("ANAV"), in other words the market value of assets not backing insurance liabilities, and (ii) the Value of In-Force ("VIF"), in other words the value of future profits emerging from insurance liabilities and back assets less by the time value of options and guarantees and costs relating to non-hedgeable risks and capital required.

#### 2.3.1 Adjusted Net Asset Value

Adjusted Net Asset Value ("ANAV") is the market value of assets that do not back insurance liabilities. It is derived from the IFRS shareholders' book equity after deducting intangible assets, subordinated liabilities and the share of revalued policyholder portfolio. The ANAV is determined at the valuation date at consolidated level, excluding minority interests and breaks down into the Required Capital and the Free Surplus.

The following diagram gives the reconciliation of the IFRS shareholders' book equity with the ANAV at 31 December 2019 :



#### The ANAV is reconciled with the IFRS shareholders' equity as follows:

- Cancellation of intangible assets: the various intangible assets whose amortisation is not projected in the VIF are restated. These intangible assets do not have a commercial value and they are assigned a nil value for the needs of determining the ANAV.
- It concerns:
- accounting goodwills which represents a book entry in accordance with the IFRS standards related to the acquisition cost of an entity;
- -deferred acquisition costs (DIR/DAC) being the nonamortized part of acquisition costs incurred at inception of insurance policies;
- -value of business acquired representing the VIF crystallised on the acquisition date of an external portfolio and amortised over time.

- Reclassification of subordinated debts: the part of subordinated debts considered as a shareholder's equity in the IFRS standards do not belong to the shareholders. So their value is not included when determining the ANAV.
- Share of revalued policyholder portfolio: fraction of the unrealized gains or losses on financial assets is deemed to belong to the shareholders under the IFRS standards in accordance with specific keys whereas the residual part is deemed to belong to the policyholders. Modelling in MCEV results in a more accurate approach in determining the part due to shareholders, which is reincorporated into the portfolio value modelling
- Contingent Liabilities: CNP Assurances considers that anticipation of the payment relative to the renewal of Brazil agreements cannot be incorporated into available surpluses, as such payment represents a firm commitment by the Group and is not an insurance commitment. Consequently, such early payments are deducted from the ANAV at 31 December 2019.

#### 2.3.2 Analysis of change in MCEV

The following table gives an analysis of variances, distinguishing VIF and ANAV, itself broken down between Free Surplus and Required Capital

(€M)	ANAV	Free Surplus	Required Capital	VIF	MCEV
MCEV 2018	12,600	10,683	1,917	9,261	21,862
Opening adjustments	(1,046)	(251)	(795)	456	(590)
Adjusted opening MCEV 2018	11,554	10,432	1,122	9,717	21,272
Value of New Business	(110)	(752)	641	654	543
Expected existing business contribution	221	221	0	1,119	1,341
Transfers from the VIF and required capital to free Surplus	1,251	1,806	(556)	(1,251)	0
Experience variances	87	71	16	350	436
Changes in assumptions relating to operating activities	0	3	(3)	(132)	(132)
Other operating variance	0	1,052	(1,052)	0	0
Operating MCEV Earnings	1,448	2,402	(954)	740	2,188
Economic variances	839	(3,979)	4,818	(3,840)	(3,001)
Other non-operating variance	(161)	(161)	0	329	168
Total MCEV earnings	2,126	(1,738)	3,864	(2,771)	(645)
Closing adjustments	(39)	(32)	(8)	(25)	(65)
MCEV 2019	13,641	8,662	4,978	6,921	20,562

#### The MCEV opening adjustments cover:

- the decrease of ANAV (- € 1,046 M) due to the payment of dividends (- € 611 M) and the inclusion of the amendment to the renewal agreements in Brazil (- € 437 M);
- the impact on VIF of + € 456 M is due to an improvement in the modelling of Savings policies in the context of low rates in France (+ € 994 M), counterbalanced by an upward revision of the cost of capital (- € 648 M).

The impact of Opening adjustments on Required Capital (-  $\in$  795 M) is due to restatment effects on VIF and Solvency 2 Required Capital.

**The Value of New Business** to the change in MCEV is +  $\in$  543 M. This value includes the net profit generated in 2019 by New Business of -  $\in$  110 M allocated to ANAV and the contribution to year-end VIF. The corresponding increase in Required Capital comes to +  $\in$  641 M.

The expected existing business contribution (+  $\in$  1,341 M) results from capitalisation of the VIF (+  $\in$  1,119 M) calculated at 31 December 2018 and the projected yield on the Free Surplus (+  $\in$  221 M) at 31 December 2018. In addition, the 2019 result attached to the 31 December 2018 VIF is transferred to the ANAV without impact on the MCEV and increases the Free Surplus both because of externalised profits from the VIF and the reduction in Required Capital.

Other operating variance correspond to subordinated debts of an amount of + € 1,052 M issued in 2019.

It results in a contribution from operational activity of +  $\in$  2,188 M on the MCEV.

As regards Free Surplus, the available Cash-flow of + € 1,350 M (excluding SD) freed up by operational activities is the "Operating Free Cash-Flow" indicator. Its interpretation and details of changes in it are given in paragraph 2.3.3.

The economic situation includes:

- Economic variances had an impact on the VIF of € 3,840 M which is mainly due to the change in rates over the year, partially offset by higher equity markets. The increase in Required Capital (+ € 4,818 M) is explained partially by the increase in Solvency 2 Required Capital due to the economic assumptions updates but also with the decrease in the VIF, because the VIF is a component of the eligible own funds for covering regulatory requirements
- $\blacksquare$  Other non-operating variances (+  $\in$  168 M) are linked to tax differences.
- Closing adjustments (- € 65 M) are due to exchange rates, essentially those of the Brazil Real (BRL).

A detailed analysis by geographic area is given in Section 3.

The following graph details the change in value between MCEV and its components (VIF and ANAV) for 31 December 2018 and 31 December 2019 grouping the different impacts together:



#### 2.3.3 Analysis of change in Free Surplus

The following graph shows the change in Free Surplus for 31 December 2019 and 31 December 2018, grouping the different impacts together:



#### Free Surplus 2018

Free Surplus 2019

The Free Surplus comes to + € 8,662 M, down - € 2,020 M compared to 2018.

The opening adjustment is -  $\in$  251 M and is mainly due to the payment of dividends (-  $\in$  611 M) and to the inclusion of the binding agreement in Brazil (-  $\in$  437 M), offset by the effects of restatement on Required Capital (+  $\in$  795 M).

The operational contribution comes to +  $\in$  2,402 M (+  $\in$  1,350 M excluding SD):

- a 2019 operating profit of + € 1,448 M, up + 1.8 % compared to 2018;
- a change in the Required Capital of € 98 M, braking down into a requirement of - € 641 linked to New Business, up compared to 2018 and a release of Required Capital of + € 543 M more than in 2018;
- subordinated debts of + € 1,052 M.

**The OFCF** shows the Group's ability to generate the Free Surplus to pay its dividends and develop through commercialization of New Business or external growth operations.

The economic contribution is -  $\in$  4,140 M résults mainly of lower rates which have a negative impact on Required Capital, and more specifically on the VIF.

The final adjustment is mainly due to exchange rate effects.

The following table gives an analysis of the OFCF, distinguishing its different components at 31 December 2019 and 31 December 2018:

(€M)	2019	2018
VIF transfers to Free Surplus	1,251	1,409
Financial income from Free Surplus	221	208
Release of required capital to Free Surplus	556	485
Experience variances	1,126	(155)
Expected contribution of In-Force	3,154	1,946
Capital required for New Business	(641)	(431)
Earnings attributable to New Business	(110)	(54)
Capital required for New Business	(752)	(485)
OPERATING FREE CASH FLOW	2,402	1,462
of which subordinated debt	1,052	0

At 31 December 2019, Operating Free Cash Flow is € 2,402 M (€ 1,350 M excluding SD).

## **2.4 IMPLIED DISCOUNT RATE**

In an alternative way to the traditional approach in which the VIF and VNB result from an update of future distributable revenue with a discount rate, the MCEV approach can also be used to deduce an implied discount rate to directly value the VIF and VNB. The implied discount rate (IDR), is defined as the discount rate as such, when used with a traditional model of embedded value, the values produced (VIF, VNB) are equal to those that result from a market-consistent valuation. This IDR is thus a result of the valuation work rather than a basic MCEV assumption. The IDR calculation requires a deterministic projection of future profits resulting from stock of existing contracts on a "real world" basis as for a traditional embedded value.

At 31 December 2019, the IDR for the Group's subsidiaries is calculated on the basis of a spread of 0 bp on the reference rate curve and a spread of 20 bps on corporate type bonds. Shares and property benefit from a risk premium of 310 bps and 230 bps (the same as at 31 December 2018) respectively.

The IDR is + 9.7 % for the Group at 31 December 2019 against + 7.5 % at 31 December 2018. This increase in the IDR is mainly explained by the increase in TVOG due to the deterioration in market conditions linked to the sharp fall in rates.

## **2.5 SENSITIVITIES**

MCEV sensitivities are based both on the economic and underlying non-economic assumptions. It should be noted that sensitivities are often correlated, so it is unlikely that the impact of two events occurring simultaneously would be equal to the sum of the individual sensitivities for each event. For events whose impact is considered symmetrical, only sensitivities in one sense are presented.

The meaning of the different sensitivities is described in the comments beneath the table below which gives the results of sensitivities:

(€M)	ANAV	VIF	MCEV	VNB
MCEV - Market-Consistent Embedded Value	13,641	6,921	20,562	543
Interest rate curve +50 bps	(286)	3,247	2,961	200
Interest rate curve -50 bps	282	(3,554)	(3,272)	(231)
No volatility adjustment (VA = 0)	-	(1,045)	(1,045)	(57)
25% decrease in equity capital values	(800)	(2,256)	(3,056)	-
Surrenders -10%	-	107	107	40
Costs -10%	-	528	528	49
Regulatory minimum Capital	-	29	29	3
Claims rates - 5% - Risk of longevity	-	(103)	(103)	(3)
Claims rates - 5% - Risk of mortality & disability	-	131	131	67
25% increase in swaption implied volatilities	-	(905)	(905)	(63)
25% increase in equity implied volatilities	-	(1,019)	(1,019)	(41)

In each of the sensitivity calculations, all other assumptions remain unchanged. No specific additional action by management has been included in the sensitivities above.

#### Interest rate curve +/-50 bps:

This sensitivity is a translation of the swap rate curve by 50 bps up or down. In particular, it results in:

- a revaluation of the market value of bonds;
- an adjustment of reinvestment rates for all classes of assets of 50 bps;
- and an update of the discount rate.

The impact on the initial mathematical provisions for Unit-Linked policies is not valued. Only the liquid part of the yield curve is subject to translation with a stable ultimate forward rate (UFR), in line with its definition under Solvency 2.

Because of the asymmetrical, non-linear impact of options and financial guarantees on MCEV, the drop in financial markets usually has a bigger impact on MCEV than the rise in interest rates, the impact gets greater with every additional drop. In the new method used, yield rates are no longer floored at O.

#### No volatility adjustment (VA):

This sensitivity is used to value the impact where there is no correction for volatility ("volatility adjustment") on activities where such a correction is used.

#### 25% decrease in equity capital values:

This sensitivity makes it possible to assess the impact on the value of immediate 25% in equity indices. This shock results in a 25% fall in the market value of financial assets in equity, and a decrease in the mathematical provisions on Unit-Linked policies for their share invested in those assets.

#### 25% increase in swaption/equity implied volatilities:

These sensitivities are used to value the impact on Time Value of Options and financial Guarantees of the 25% increase in swaption and equity volatility.

#### Surrenders -10%:

This sensitivity measures the impact of a 10% decrease in total and partial annual surrender rates.

#### Costs -10%:

This sensitivity is used to value the impact of a 10% decrease in all costs: acquisition, management, claim and structure costs.

#### Claims -5%:

This sensitivity measures the impact of a fall in claims: the incidence rate, loss ratios, disability and incapacity rate and mortality tables have been reduced by 5%. Sensitivities to longevity risk, mortality risk and long term disability risk are measured separately.

#### **Regulatory minimum Required Capital:**

This sensitivity consists of defining Required Capital as 100% of the required regulatory solvency margin, considering as stable the share of subordinated securities, and of measuring the impact of this change of assumption on value



## 3

## Results detailed by

## geographic area

3.1	Overview	25
3.2	France	27
3.2.1	Value of New Business	27
3.2.2	MCEV at 31 december 2019	29
3.3	Latin America	32
3.3.1	Value of New Business	32
3.3.2	MCEV at 31 december 2019	34
3.4	Europe excluding France	36
3.4.1	Value of New Business	36
3.4.2	MCEV at 31 december 2019	38

## **3.1 OVERVIEW**

The following section gives an analysis of the main indicators and main vectors for change by geographic area.

The following tables give the overall results and the contribution of the different geographic areas to the CNP Group's MCEV and VNB results. Detailed analyses for each area follow.

			France	Latin America	Europe excluding France	Group
		2018	414	178	67	659
VNB (€M)		2019	263	206	74	543
	change		(151)	28	7	(116)
		2018	63 %	27 %	10 %	100 %
Share in Group VNB (%)		2019	48 %	38 %	14 %	100 %
		2018	2,101	591	399	3,090
APE (€M)		2019	2,146	692	348	3,186
	change		45	101	51	95
		2018	19.7 %	30.1 %	16.9 %	21.3 %
Margin rate (%)		2019	12.3 %	29.7 %	21.4 %	17.1 %
	change		7.4 %	O.4 %	4.5 %	4.3 %

			France	Latin America	Europe excluding France	Group
		2018	19,098	1,623	1,141	21,862
MCEV (€M)		2019	17,299	1,899	1,364	20,562
	change		(1,799)	275	223	(1,300)
Share in Group MCEV (%)		2018	87 %	7 %	5 %	100 %
		2019	84 %	9 %	7 %	100 %
		2018	8,168	799	294	9,261
VIF (€M)		2019	5,534	1,005	382	6,921
	change		(2,635)	206	88	(2,340)
ANAV (€M)		2018	10,930	824	847	12,600
		2019	11,766	893	982	13,641
	change		836	69	135	1,040

The following table gives VIF sensitivities by geographic area:

(€M)	France	Latin America	Europe excluding France	Group
VIF 2019	5,534	1,005	382	6,921
Interest rate curve +50 bps	3,253	(27)	21	3,247
Interest rate curve -50 bps	(3,554)	29	(29)	(3,554)
No volatility adjustment (VA = 0)	(1,041)	0	(3)	1,045
25% decrease in equity capital values	(2,203)	0	(54)	(2,256)
Surrenders -10%	35	65	7	107
Costs -10%	492	16	20	528
Regulatory minimum Required Capital	29	0	0	29
Claims rates - 5% - Risk of longevity	(97)	0	(6)	(103)
Claims rates - 5% - Risk of mortality & disability	85	34	12	131
25% increase in swaption implied volatilities	(902)	0	(3)	(905)
25% increase in equity implied volatilities	(1,013)	0	(6)	(1,019)

#### The following table gives VNB sensitivities by geographic area:

(€M)	France	Latin America	Europe excluding France	Group
VNB 2019	263	206	74	543
Interest rate curve +50 bps	198	(4)	6	200
Interest rate curve -50 bps	(229)	4	(6)	(231)
No volatility adjustment (VA = 0)	(57)	0	(1)	(57)
Surrenders -10%	19	20	2	40
Costs -10%	36	8	6	49
Regulatory minimum Required Capital	2	0	1	3
Claims rates - 5% - Risk of longevity	(1)	0	(1)	(3)
Claims rates - 5% - Risk of mortality & disability	55	7	4	67
25% increase in swaption implied volatilities	(63)	0	(O)	(63)
25% increase in equity implied volatilities	(40)	0	(1)	(41)

## **3.2 FRANCE**

Business in France is split into several segments: Savings-Pensions, Credit Insurance and Protection products.

2019 is characterized by the fall in rates that greatly affected value.

The positive operational contribution, driven by favourable Product Mix on the Euro Savings and Credit Insurance segments, is masked by the impact from rates on the MCEV indicators.

€ 263 M	VNB 2019
12.3 %	MARGIN RATE ON NEW BUSINESS
48 %	OF GROUP VNB

#### 3.2.1 Value of New Business

The following table gives the breakdown of VNB :

		2019	2018	Chan	ge
(€M , %)				€M	%
PVFP	Present Value of Future Profits	616	656	(40)	(6 %)
TVOG	Time Value of Options and Guarantees	(218)	(151)	(68)	45 %
FCRC	Frictional Cost of Required Capital	(12)	(7)	(5)	64 %
CRNHR	Cost of Non-Hedgeable Risks	(122)	(84)	(38)	45 %
VNB	Value of New Business	263	414	(151)	(36 %)
APE	Annual Premium Equivalent	2,146	2,101	45	2 %
PVNBP	Present Value of New Business Pre- miums	20,283	20,105	178	1%
	Margin Rate	12.3 %	19.7%	(7.4 %)	(38 %)
	PVNBP ratio	1.3 %	2.1 %	(0.8 %)	(37%)

The APE volume in France ( + € 2,146 M), up compared to 2018, is characterized by an increase in Euro Savings and Credit Insurance volumes, offset by a decrease in Unit-Linked Savings volumes.

The Value of New Business comes to + € 263 M at end 2019 against + € 414 M in 2018 or a decrease of - 36 %.

The following table gives a detailed analysis of the main factors of changes in the Value of New Business :

(€M, %)	VNB	Change	Margin rate
Value of New Business 2018	414		19.7 %
Updated model and scope	425	11	19.9 %
Change in the APE volume	427	2	19.9 %
Change in the Segment Mix	432	5	20.1 %
Change in experience	454	22	21.1 %
Change in financial market conditions	244	(209)	11.4 %
Updated taxation	263	19	12.3 %
Change in the foreign exchange rate	263	0	12.3 %
Value of New Business 2019	263	(151)	12.3 %
Change	(151)		(7.4 %)

- Updated model and scope (+ € 11 M) relates mainly to the inclusion of gross loading guarantees on the Euro Savings products and N-1 actual sales for Credit Insurance, counterbalanced by an upward revision of the surrenders laws on Savings and of the cost of capital on operational and surrenders risks.
- Change in APE volume (+ € 2 M) is due to the increase in volumes on Euro Savings and Credit Insurance offset by the decrease in volumes on Unit-Linked Savings.
- Change in the Segment Mix (+ € 5 M) includes the difference in the distribution of sales between different segments. It is affected by the increase in volumes on Credit Insurance, offset by the lower volume of Unit-Linked Savings.
- Change in experience (+ € 22 M) is due to the favourable Product Mix on Euro Savings (development of gross loading guarantees) and Credit Insurance, reduced by the update of surrenders on Credit Insurance.
- Change in financial market conditions (- € 209 M) reflects lower rates which increase, in an growing number of scenarios, the cost of capital guarantee on Euro Savings products.
- $\scriptstyle \bullet$  Updated taxation (+  $\in$  19 M) follows the downward revision of tax rates.

#### The following table gives the duration of New Business:

Duration (years)	2019	2018
Savings & Pensions	14.3	15.7
Risk & Protection	6.4	6.8

#### 3.2.2 MCEV at 31 december 2019

The following table gives a breakdown of In-Force values for France perimeter, excluding Subordinated Debt cost:

	2019		2018		Change	
	€M	€/share	€M	€/share	€M	%
Value of In-Force	5,534	8.1	8,168	11.9	(2,635)	(32.3 %)
Present Value of Future Profits	12,142	17.7	12,246	17.8	(104)	(0.8 %)
Time Value of Options and Guarantees	(4,556)	(6.6)	(3,114)	(4.5)	(1,442)	46.3 %
Frictional Cost of Required Capital	(498)	(0.7)	(358)	(O.5)	(140)	39.3 %
Cost of Non-Hedgeable Risks	(1,555)	(2.3)	(606)	(O.9)	(949)	156.6 %

The VIF of France (+  $\in$  5,534 M) is down - 32.3 % compared to 2018 because of the unfavourable economic environment (-  $\in$  3,896 M), offset by a positive operational contribution (+  $\in$  601 M).

The following table gives an analysis of variances, distinguishing VIF and ANAV, itself broken down into Free Surplus and Required Capital:

(€M)	ANAV	Free Surplus	Required Capital	VIF	MCEV
MCEV 2018	10,930	9,741	1,189	8,168	19,098
Opening adjustments	(893)	(95)	(798)	330	(563)
Adjusted opening MCEV 2018	10,037	9,646	391	8,498	18,535
Value of New Business	(17)	(454)	437	280	263
Expected existing business contribution	205	205	0	1,013	1,218
Transfers from the VIF and required capital to free Surplus	914	1,298	(385)	(914)	0
Experience variances	6	3	3	377	383
Changes in assumptions relating to operating activities	0	(O)	0	(155)	(155)
Other operating variance	0	1,052	(1,052)	0	0
Operating MCEV Earnings	1,108	2,104	(996)	601	1,710
Economic variances	782	(4,025)	4,807	(3,896)	(3,115)
Other non-operating variance	(141)	(141)	0	331	189
Total MCEV earnings	1,749	(2,062)	3,811	(2,965)	(1,216)
Closing adjustments	(20)	(20)	0	0	(20)
MCEV 2019	11,766	7,564	4,201	5,534	17,299

**Opening adjustments** affect the MCEV (-  $\in$  563 M) consisting of :

- a decrease of the ANAV (- € 893 M) mainly due to inclusion of the amendment to binding agreement in Brazil (- € 437 M) and payment of the Group dividend for the 2018 financial year (- € 374 M).
- an impact on the VIF of + € 330 M mainly due to modelisation improvement of Savings products within lower rates environment in France (+ € 994 M),counterbalanced by an upward revision of the cost of capital (- € 648 M).

Opening adjustments affect the Required Capital downwards (-  $\in$  798 M) due to the restatement effects on the VIF and the Solvency 2 Required Capital.

The Value from new business is +  $\in$  263 M. This value includes the net income generated in 2019 by New Business for -  $\in$ 17 M added to ANAV. The corresponding increase in Required Capital is up to +  $\in$  437 M.

The Expected existing business contribution (+  $\in$  1,218 M) results from capitalisation of the VIF (+  $\in$  1,013 M) and the projected yield on the Free Surplus (+  $\in$  205 M). For transfers of the VIF and Required Capital to Free Surplus, the 2019 result for the 31 December 2018 VIF is transferred to the ANAV with no impact on the MCEV.

The experience variances affect the MCEV of +  $\in$  383 M is explained by a better than expected evolution of the Credit Insurance portfolio with notably fewer surrenders.

The changes in assumptions relating to operational activity have an impact of -  $\in$  155 M on the VIF.

The contribution from operating activities is  $\in$  1,710 M on the MCEV results (Operating MCEV Return of + 9.2 %).

2019	2018
18,535	18,991
1,710	1,356
9.2 %	7.1 %
	2019       18,535       1,710       9.2 %

As regards the Free Surplus, the Available Cash-flow of +  $\in$  2,104 M (+  $\in$  1,350 M excluding SD) produced by operational activities correspond to the "Operating Free Cash-Flow" indicator.

**Economic Variances** result in a -  $\in$  3,115 M decrease in MCEV mainly because of lower rates which has an unfavourable impact on the VIF, partialy offset by the rise in the equity market.

The increase in Required Capital (+  $\leq$  4,807 M) is partly explained by the increase in Solvency 2 Required Capital following the update of the economic assumptions, but also by the decrease in the VIF, since the VIF is an eligible capital item to cover regulatory requirements.

Other non-operating variances (+  $\in$  189 M) result from variances in taxation.

 $\ensuremath{\textbf{Closing}}$  adjustments are an exchange rate effect change on the ANAV.

## **3.3 LATIN AMERICA**

The Latin America area covers the activities of Caixa Seguradora Group in Brazil and CNP Assurances Compañia de Seguros in Argentina.

2019 is marked by strong growth in the volume of Pensions and Credit Insurance segments, offset by the approaching of the change in capital share on the renewed JV1 perimeter (Prestamista, Vida and Previdência).

€ 206 M	VNB 2019
29.7 %	MARGIN RATE ON NEW BUSINESS
38 %	OF GROUP VNB

#### 3.3.1 Value of New Business

The following table gives a breakdown of VNB and the main volume and profitability indicators:

		2019	2018	Chang	е
(€M. %)				€M	%
PVFP	Present Value of Future Profits	237	201	36	18 %
TVOG	Time Value of Options and Guarantees	0	0	0	0 %
FCRC	Frictional Cost of Required Capital	(11)	(10)	(1)	6 %
CRNHR	Cost of Non-Hedgeable Risks	(20)	(13)	(7)	54 %
VNB	Value of New Business	206	178	28	16 %
APE	Annual Premium Equivalent	692	591	101	17 %
PVNBP	Present Value of New Business Premiums	3,991	2,974	1,017	34 %
	Margin rate	29.7 %	30.1 %	(0.4 %)	(1 %)
	PVNBP ratio	5.2 %	6.0 %	(O.8 %)	(14 %)

The APE is up on the Latin America perimeter (+ 20.6 % at constant exchange rate), mainly driven by the Pensions and Credit Insurance segments because of good volume on the consumer credit range, on Previdência and on Consorcios, offset by the approaching of the change in capital share on the renewed JV1 perimeter (Prestamista, Vida and Previdência)

The Value of New Business is up by 16 %, at € 28 M.

The following table gives a detailed analysis of the main factors for change in the Value of New Business:

(€m. %)	VNB	CHANGE	MARGIN RATE
Value of New Business 2018	178		30.1 %
Updated model and scope	181	3	30.0 %
Change in the APE volume	214	33	30.0 %
Change in the segment mix	205	(9)	28.8 %
Change in experience	203	(2)	28.5 %
Change in financial market conditions	212	9	29.7 %
Updated taxation	212	0	29.7 %
Change in the foreign exchange rate	206	(6)	29.7 %
Value of New Business 2019	206	28	29.7 %
Change	28		(O.4 %)

- ${\scriptstyle \blacksquare}$  Updated model and scope (+  ${\it \in}$  3 M) is due to:
  - the switch to 40 % of the share on the JV1 perimeter from 2021 instead of 2019 (+  $\in$  17 M);
  - the continuation of the review of modelling on almost all products (–  $\in$  14 M).
- Change in APE volume (+ € 33 M) is due to the increase in volumes on Pensions and Credit Insurance segments
- The update of the Segment Mix (- € 9 M) results in a negative impact explained mainly by the increase in volumes on Consorcios, whose profitability is lower.
- Change in experience (- € 2 M) is small in this year. It is due to an unfavourable Product Mix and lower loadings on Pensions, offset by the lower expenses on Youse.
- Change in financial market conditions (+ € 9 M) is favourable and due to lower rates in 2019.
- Change in average exchange rate (- € 6 M) is unfavourable. For Brazil and Argentina, it is respectively 4.4134 BRL/€ and 53.8777 ARS/€ in 2019 against 4.3085 BRL/€ and 32.9896 ARS/€ in 2018.

#### The following table gives the duration of New Business:

Duration (years)	2019	2018
Savings & Pensions	7.7	7.4
Risk & Protection	4.6	3.9

#### 3.3.2 MCEV at 31 december 2019

The following table gives the breakdown of Values In-Force :

	2019		2018		Change	
	€M	€/share	€M	€/share	€M	%
Value of In-Force	1,005	1.5	799	1.2	206	25.8 %
Present Value of Future Profits	1,194	1.7	968	1.4	226	23.3%
Time Value of Options and Guarantees	(1)	(O.O)	(1)	(0.0)	(O)	16.0 %
Frictional Cost of Required Capital	(44)	(O.1)	(45)	(O.1)	0	(O.6 %)
Cost of Non-Hedgeable Risks	(143)	(0.2)	(123)	(0.2)	(20)	16.2 %

The VIF (+ € 1,005 M) is up + € 206 M (+ 25.8 %) compared to 2018, mainly because initial adjustments (+ € 86 M), the fall in rates (+ € 68 M) and capitalisation of the VIF (+ € 79 M).

The following table gives an analysis of variances, distinguishing VIF and ANAV, itself broken down into Free Surplus and Required Capital:

(€M)	ANAV	Free Surplus	Required capital	VIF	MCEV
MCEV 2018	824	493	331	799	1,623
Opening adjustments	(184)	(188)	4	86	(98)
Adjusted opening MCEV 2018	640	305	335	885	1,525
Value of New Business	(70)	(167)	98	275	206
Expected existing business contribution	11	11	0	79	90
Transfers from the VIF and required capital to Free Surplus	251	306	(55)	(251)	0
Experience variances	71	69	2	(41)	30
Changes in assumptions relating to operating activities	0	1	(1)	15	15
Other operating variance	0	0	0	0	0
Operating MCEV Earnings	263	221	42	77	341
Economic variances	31	31	(O)	68	100
Other non-operating variance	(22)	(22)	0	0	(22)
Total MCEV earnings	273	230	42	146	418
Closing adjustments	(20)	(12)	(8)	(25)	(45)
MCEV 2019	893	524	369	1,005	1,899

**Opening adjustments** affect the MCEV (-  $\in$  98 M) mainly due to the payment of dividends (-  $\in$  184 M). The improvement in projection models and the change of the share on the JV1 perimeter (share 51.75 % up to 2020 and 40 % thereafter) also increases the MCEV (+  $\in$  86 M).

The Value of New Business contributes up to +  $\in$  206 M to the increases in the MCEV. This New Business requires a corresponding increase in Required Capital of +  $\in$  98 M.

The expected existing business contribution (+  $\in$  90 M) results from capitalisation of the VIF (+  $\in$  79 M) and the projected yield on the Free Surplus (+  $\in$  11 M). For transfers of VIF and Required Capital to Free Surplus, the 2019 result relating to the 31 December 2018 VIF is transferred to the ANAV without impact on the MCEV.

The experience variances affect the VIF of -  $\in$  41 M basically due to under-estimation of claims.

Changes in assumptions relating to operating activities result in an increase in VIF of +  $\in$  15 M due to the review of non economic assumptions.

There results in a contribution from operational activity of  $\odot$  341,5 M on the MCEV (Operating MCEV Return of 22.3 %).

Latin America	2019	2018
Adjusted opening MCEV n-1	1,525	1,535
Operating MCEV Earnings	341	255
Operating MCEV Return	22.3 %	16.6%

As regards Free Surplus, the available Cash-flow of +  $\in$  221 M produced by operational activities is the "Operating Free Cash-Flow" indicator.

**Economic variances** have an impact of +  $\in$  100 M on the MCEV, including + $\in$  31 M on the ANAV. The impact is basically due to lower rates.

Other non-operating variances (-  $\in$  22 M) are linked to tax differences.

**Closing adjustments** are for exchange rate effects. The variation in exchange rates is unfavourable in Latin America.

## **3.4 EUROPE EXCLUDING FRANCE**

The Europe excluding France geographic area covers CNP UniCredit Vita, CNP Santander Insurance (with business in Germany, Italy, Spain, Poland, the Scandinavian countries and Austria), CNP Luxembourg, CNP Partners and CNP Cyprus Insurance Holdings.

2019 is characterized by an increase in profitability on the Risk and Protection segment offset by the fall on the Savings segment.

€ 74 M	VNB 2019
21.4 %	MARGIN RATE ON NEW BUSINESS
14 %	OF GROUP VNB

#### 3.4.1 Value of New Business

The following table gives a breakdown of the VNB:

		2019	2018	Cha	nge
(€M, %)				€M	%
PVFP	Present Value of Future Profits	82	75	7	9 %
TVOG	Time Value of Options and Guarantees	(4)	(3)	(1)	20 %
FCRC	Frictional Cost of Required Capital	(O)	(1)	1	(63) %
CRNHR	Cost of Non-Hedgeable Risks	(4)	(4)	0	(6) %
VNB	Value of New Business	74	67	7	10%
APE	Annual Premium Equivalent	348	399	(51)	(13) %
PVNBP	Present Value of New Business Premiums	2,555	3,047	(493)	(16) %
	Margin rate	21.4 %	16.9 %	4.5 %	27 %
	PVNBP ratio	2.9 %	2.2 %	0.7 %	32 %

The APE volume in Europe excluding France (+ € 348 M), down by 13 %, results from a decrease of volume in Unit-Linked for CNP UniCredit Vita Savings. To be also noted the transition to 100% of the CNP Cyprus Insurance Holdings capital share.

The Value of New Business is up, at  $\in$  74 M (or +  $\in$  7 M).

The following table gives a detailed analysis of the main factors in the change in Value of New Business:

(€M, %)	VNB	Change	Margin rate
Value of New Business 2018	67		16.9 %
Updated model and scope	76	9	18.8 %
Change in the APE volume	71	(5)	20.4 %
Change in the segment mix	73	2	20.9 %
Change in experience	79	7	22.8 %
Change in financial market conditions	74	(5)	21.4 %
Updated taxation	74	0	21.4 %
Change in the foreign exchange rate	74	0	21.4 %
Value of New Business 2019	74	7	21.4 %
Change	7		4.5 %

- Updated model and scope (+ € 9 M) is basically the transition to 100 % of the CNP Cyprus Insurance Holdings capital share (+ € 3.4 M), the inclusion of a liquidity premium on the rate curve (VA) in Italy (+ € 2.0 M) and changes to the premium projection period (contract boundaries) for some policies on Santander (+ € 1.8 M).
- Change in the APE volume (- € 5 M) decreases by the fall in volumes on CNP UniCredit Vita Savings products subsequent to termination of marketing the PIR product and withholding of commission on Calybra.
- $\scriptstyle \bullet$  Change in the segment mix (+  $\rm \in 2~M)$  is insignificant for this year.
- Change in experience (+ € 7 M) is positive, in particular because of sales of products with better margins on Santander Credit Insurance and lower claims on CNP Italia.
- The low rate economic environment has had a negative impact on value on Euro Savings products (-  $\in$  5 M).

#### The following table gives the duration of New Business:

Duration (years)	2019	2018
Savings & Pensions	7.4	5.3
Risk & Protection	2.5	2.5

#### 3.4.2 MCEV at 31 december 2019

The following table gives the breakdown in Values In-Force:

	2019		2018		Change	
	€M	€/share	€M	€/share	€M	%
Value of In-Force	382	0.6	294	0.4	88	30.1 %
Present Value of Future Profits	432	0.6	337	O.5	94	28.0 %
Time Value of Options and Guarantees	(33)	(0.0)	(29)	(O.O)	(4)	13.4 %
Frictional Cost of Required Capital	(1)	(O.O)	(4)	(O.O)	3	(64 %)
Cost of Non-Hedgeable Risks	(15)	(O.O)	(11)	(O.O)	(5)	44.2 %

VIF of Europe excluding France (€ 382 M) is up + 30.1 % compared to 2018. The TVOG is up because of the unfavourable economic environment.

The following table gives an analysis of variances, distinguishing VIF and ANAV, itself broken down into Free Surplus and Required Capital:

(€M)	ANAV	Free surplus	Required Capital	VIF	MCEV
MCEV 2018	847	449	398	294	1,141
Opening adjustments	30	32	(2)	41	71
Adjusted opening MCEV 2018	877	481	396	334	1,212
Value of New Business	(24)	(131)	106	98	74
Expected existing business contribution	5	5	0	27	33
Transfers from the VIF and required capital to free surplus	86	202	(116)	(86)	0
Experience variances	10	(1)	11	14	24
Changes in assumptions relating to operating activities	0	2	(2)	8	8
Other operating variance	0	0	0	0	0
Operating MCEV Earnings	76	77	(O)	62	138
Economic variances	26	14	12	(12)	14
Other non-operating variance	2	2	0	(2)	0
Total MCEV earnings	104	93	11	48	152
Closing adjustments	0	0	(O)	(O)	(O)
MCEV 2019	982	574	408	382	1,364

**Opening adjustments** affect the MCEV (+  $\in$  71 M) consisting of :

- an increase in ANAV (+ € 30 M) due to the 100% acquisition of the Cyprus subsidiary (+ € 83 M) offset by the payment of dividends on Santander (- € 39 M) and Cyprus (- € 15 M);
- an increase in VIF (+ € 41 M) mainly because of the change in the share on Cyprus (+ € 32 M) and models improvements on CNP UniCredit Vita and CNP Partners (+ € 8 M).

**The Value of New Business** in MCEV is + € 74 M, mostly driven by the CNP Santander subsidiary (+ € 46 M) and the Italian subsidiary CNP UniCredit Vita (+ € 25 M). It includes the net result generated in 2019 by New Business of - € 24 M posted to ANAV, almost exclusively resulting from the Italian subsidiary because of the withholding of commission on some products. The corresponding increase in Required Capital comes to + € 106 M, mostly due to CNP Santander's business.

The expected existing business contribution (+ € 33 M) results from capitalisation of the VIF (+ € 27 M) and the projected yield on the Free Surplus (+ € 5 M). Changes in the VIF enable + € 116 M to be released as regards Required Capital and + € 86 M to be transferred to ANAV, driven by the results on stock in the Italian subsidiary (+ € 41 M) and CNP Santander subsidiary (+ € 29 M). For transfers of VIF and Required Capital to Free Surplus, the 2019 result from the December 2018 VIF is transferred to the ANAV without impact on the MCEV.

**Experience Variances** affect the ANAV by +  $\in$  10 M. The VIF is affected up to +  $\in$  14 M.

Changes in assumptions relating to operating activities  $\mathsf{affect}$  the VIF of \*  $\in$  8 M.

The result is a contribution from operational activity of +  $\in$  138 M on the MCEV (Operating MCEV Return of 11.4 %). The OFCF is +  $\in$  77 M.

Europe excluding France	2019	2018
Adjusted opening MCEV n-1	1,212	1,099
Operating MCEV Earnings	138	98
Operating MCEV Return	11.4 %	8.9 %

**Economic variances** have a +  $\in$  14 M impact on MCEV, of which +  $\in$  26 M for ANAV, due to variations in unrealized gains and loss on the equity capital of all subsidiaries. The impact on VIF of -  $\in$  12 M is mainly driven by CNP Partners (-  $\in$  17 M) subsequent to the deterioration in market conditions which increase, in an growing number of scenarios, the cost of capital guarantee on Euro Savings products.



# 4

## Method

4.1	Adjusted Net Asset Value	42
4.1.1	Required Capital	42
4.1.2	Free Surplus	42
4.2	Value of In-Force (VIF)	43
4.2.1	Present Value of Future Profits (PVFP)	43
4.2.2	Time Value of Options and Guarantees (TVOG	43
4.2.3	Frictional Cost of Required Capital (FCRC)	44
4.2.4	Cost of Residual Non-hedgeable risks (CRNHR)	44
4.3	Value of New Business (VNB)	45
4.3.1	Definition of New Business	45
4.3.2	Valuation Method	45
	4.1 4.1.1 4.2 4.2 4.2.1 4.2.2 4.2.3 4.2.3 4.2.4 4.3 4.3.1 4.3.2	<ul> <li>4.1 Adjusted Net Asset Value</li> <li>4.1.1 Required Capital</li> <li>4.1.2 Free Surplus</li> <li>4.2 Value of In-Force (VIF)</li> <li>4.2.1 Present Value of Future Profits (PVFP)</li> <li>4.2.2 Time Value of Options and Guarantees (TVOG</li> <li>4.2.3 Frictional Cost of Required Capital (FCRC)</li> <li>4.2.4 Cost of Residual Non-hedgeable risks (CRNHR)</li> <li>4.3 Value of New Business (VNB)</li> <li>4.3.1 Definition of New Business</li> <li>4.3.2 Valuation Method</li> </ul>

## **4.1 ADJUSTED NET ASSET VALUE**

The Embedded Value represents the consolidated value of shareholders' interests generated by insurance business in portfolio on the date of valuation. It is calculated before the payment of dividends and taxes related to such dividends. This value excludes any incorporation of future business, in other words policies incepted after the valuation date (except for Group Protection). The method used by the CNP Assurances Group is based on the MCEV principles©. This chapter provides information on the way in which those principles are applied by the CNP Assurances Group.

Adjusted Net Asset Value ("ANAV") represents the fair value of assets that do not back insurance liabilities minus the fair value of liabilities other than insurance liabilities. The ANAV is reconciled with the IFRS shareholders' equity as follows:

 the elimination of intangible assets especially acquisition variances, the value of sales agreements, portfolios acquired and deferred acquisition costs, except for acquisition costs that have already been amortised in the VIF;



- the reincorporation of the shareholders' portion in unrealized gains not included in IFRS (especially for property assets and securities in the books at amortised cost) and the deduction of the portion of revaluations of financial assets included in the portfolio value modelling;
- the restatement of subordinated securities.

The ANAV is determined at the date of valuation for consolidated figures and for each of the subsidiaries by excluding minority interests and is split into Required Capital and Free Surplus.

#### 4.1.1 Required capital

The Required Capital corresponds to the market value of assets representing equity that the insurer must immobilize as regards its business and the distribution of which to shareholders is restricted.

The Required Capital reflects the level of capital that the Group sets to attain a target rating and control of its own risks as well as all other fixed components.

For European countries, the Required Capital is 110 % of the regulatory solvency Required Capital in accordance with the Solvency 2 standard, net of all other sources of funding such as subordinated securities and future profits on policies in stock valued in a Solvency 2 universe. The Required Capital for each entity is calculated on the basis of its individual SCR. The decree of 24 December 2019, which allows surplus funds to be taken into account in the solvency ratio, has no change on this assumption.

For Latin America, the Required Capital chosen by the CNP Assurances Group is 110 % of the solvency Required Capital under the local standard, which also includes a component linked to market risk.

#### 4.1.2 FREE SURPLUS

The Free Surplus is the value of the ANAV minus the Required Capital.

## **4.2 VALUE OF IN-FORCE (VIF)**

The VIF consists of the Present Value of Future Profits (PVFP) minus the following components:

- the Time Value of Options and Guarantees (TVOG);
- the Frictional Cost of Required Capital (FCRC);
- the Cost of Residual Non-Hedgeable Risks (CRNHR).

#### 4.2.1 Present value of future profits (PVFP)

The PVFP is the present value of Future Profits net of tax generated by policies in portfolio at the date of valuation and with a central assumption of changes in financial markets aligned with the reference rate curve on the basis of a market-consistent method. The Group's choice as regards the reference rate curve is described in the "Assumptions" section of this report.

The PVFP included the intrinsic value of options and financial guarantees on policies in portfolio. The main options and financial guarantees included are as follows:

- credited rate guarantees (Minimum Guaranteed Rate);
- floor guarantees on Unit-Linked policies;
- technical rate guarantees on annuities being paid and guarantees resulting from the point acquisition tariff for the Préfon portfolio and other L.441 products;
- profit sharing options;
- surrender options

The Time Value of Options and Financial Guarantees is incorporated separately in the TVOG.

#### 4.2.2 Time value of options and guarantees (TVOG)

The Time Value of Options and Financial Guarantees ("TVOG") is generated by the asymmetry of risk sharing between shareholders and policyholders in accordance with the diverse changes on financial markets. Stochastic calculations are used, on the basis of multiple simulations, to scan the field of possibilities in terms of changes on financial markets and so capture the cost linked to financial options held by policyholders.

The valuation is based on a stochastic model itself based on a neutral-risk approach. This approach consists of setting the price of an asset as the expected future yield updated at the reference rate. The economic generator Moody's Analytics is used to generate 1,000 scenarios projecting:

- the change in equities indices;
- the change in the property index;
- the actual rate curves for whole maturities between 1 year and 50 years;

Inflation is obtained by the difference between actual rates and nominal rates for 1 year maturity. The share dividend rate and property rent rate are set at 2.5% of the fair value of shares and property assets respectively and are supposed constant.

The lack of market depth (in particular the interest rate option) introduce an uncertainty regarding the consistency of asset prices on financial markets. In this context, this year, CNP Assurances uses a technique for extending the forward scattering (PPF) on the most extrems downside scenarios.

- the nominal rate curve for whole maturities between 1 year and 50 years;
- the corporate credit spread curves (AAA to CCC ratings) for whole maturities between 1 year and 50 years.

The treshold level, beyond which the PPF is applicated, is calibrated in such a way that the price replication differences in the observed options are within the ranges of the bid/ask prices for the products in question.

The techniques used by the Group to calibrate the economic generator are described in the "Assumptions" section of this report. In addition, the projection model incorporates a competitive surrender component that represents the propensity of policyholders to surrender their policies when the actual return deteriorates compared to a market reference.



#### 4.2.3 Frictionnal cost of required capital

The need to block the Required Capital in respect of business covered results in a carry cost to be allocated to the value of Embedded Value and New Business. In market-consistent modelling, Frictional Costs are the cost of taxation friction and financial costs related to backing that capital.

The cost of interest paid to holders of subordinated debt is included in the value of business in portfolio. The approach used is as follows: the reference value of subordinated securities is determined in reference to the method given in the article 75 of Solvency 2 directive and the 5th orientation paper by EIOPA. It consists of using a valuation of subordinated securities taking account of the spread on issue and the exact characteristics of the securities.

The Frictional Cost of Required Capital also includes the charge linked to funding a part of the Required Capital by subordinated securities; this charge is valued as the difference between the economic value of subordinated securities and their nominal. The CNP Assurances Group defines this economic value as being the present value net of future amounts paid to holders of securities calculated taking account, in the discount rate, of the spread on issue of each security. The Required Capital for new production is deemed to be funded by subordinated securities in the same proportions as the stock of policies; the funding is achieved by newly issued securities, for which the economic value is equal to the nominal.

#### 4.2.4 Cost of residual non-hedgeable risks (CRNHR)

The cost allocated to non-hedgeable financial and non financial risks results from:

- the inclusion of risks also not valued in the PVFP or TVOG such as the counterparty default risks and operational risks.
- the asymmetrical impact of particular non-hedgeable risks on value and especially mortality, longevity and morbidity risks included in policyholders' with-profits clauses.
- the uncertainty underlying the establishment of assumptions on non-hedgeable risks concerning claims, surrenders and costs, that are estimated using a "best estimate" approach.

The Group has used a cost of capital approach to value these residual non-hedgeable risks. The capital allocated as regards these risks is defined as the contribution of each of the specified risks to a level of capital and according to Solvency 2.

## 4.3 VALUE OF NEW BUSINESS (VNB)

#### 4.3.1 Definition of New Business

Projections made to estimate the value of a year's new production are based on the profile and volume of New Business done in 2019.

## Individual traditional and Unit-Linked Savings and Pensions:

New production consists of new policies and unscheduled payments on existing policies, without assumption on the recurrence of premiums.

#### **Collective Pensions:**

New production of Collective Pension policies consists of new policies and unscheduled payments on existing policies. It concerns L.441 and corporate Pension policies in France and PGBL/VGBL policies (Unit-Linked Pensions) in Brazil.

#### Individual Protection:

New production consists only of new policies and future premiums attached to those policies. Future periodic premiums on existing policies are valued in the value of stock.

#### 4.3.2 Valuation method

The approach retained for the valuation of New Business consists in determining aggregates identical to those of the value of stock: it is defined as the present value of projected results for polices written in the year after deducting of the

#### Traditionally, there are two methods of measuring its contribution:

- the "stand alone" method: the value of new business is measured without taking into account the pooling effect with policies in stock and a part of the unrealised gains or losses on assets representing stock;
- the "marginal" method: the value of new business is measured taking into account pooling between new policies and policies en stock, and taking into account part of the unrealised gains or losses on assets representing stock.

#### The Group uses:

## a marginal method for valuing its VNB but that varies operationally depending on the product:

for all portfolios excluding traditional Savings, no unrealized gains and losses is taken into account in determining the VNB, and premiums on New Business are deemed to be invested in new assets available at the date of valuation in accordance with the investment policy applied in the year; because there are no significant interactions between New Business and stock, using a "stand alone" is method equivalent for these products to using a "marginal" method and is preferred operationally;

#### **Collective Protection:**

As Collective Protection policies are annual from 1<sup>st</sup> January to 31<sup>st</sup> December with a inception date prior to 1<sup>st</sup> January, new production in a year consists policies whose cover period is the year following the current year.

#### Credit Insurance:

New production consists of new policies and future premiums attached to those policies. Future periodic premiums on existing policies are valued in the value of stock.

#### **Other Products:**

New production consists only of new policies and future premiums attached to those policies, projected periodically and split as annual, monthly or one-off policies. Future periodic premiums on existing policies are valued in the value of stock for the year.

Time Value of Financial Options and Guarantees, Frictional Cost of Required Capital, and the Cost of Residual Non-hedgeable Risks. The Value of New Business is based on a projection of its contribution to results as from the date of sales.

for traditional Savings portfolios, in France, Italy and Spain, the revaluation of policies does not distinguish different generations of identical policies, and depends on the financial performance linked to financial assets representing generations overall without distinction: a "marginal" method is applied operationally. For those portfolios, the method consists of taking into account a fraction of the Group's unrealised capital gains or losses and supposing that it is used for New Business alone.



## Assumption

5

5.1	Economic Assumptions	48
5.1.1	Interest rate reference curve	48
5.1.2	Calibrating the rate model	49
5.1.3	Calibrating the equity model	50
5.1.4	Calibrating the other diversified index	50
5.1.5	Calibrating the corporate credit spread model	50
5.1.6	Exchange rate	51
5.1.7	Tax rate	51
5.1.8	Cost of capital allocated to residual non-hedgeable risks	51
5.1.9	Subordinated Securities finance rate	51
5.2	Non economic Assumptions	52
5.2.1	Expenses assumptions	52
5.2.2	Claims and persistence assumptions	52
5.2.3	Future management decisions	52

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## **5.1 ECONOMIC ASSUMPTIONS**

Embedded Value calculations are based on financial assumptions determined from market conditions at 31 December 2019 :

#### 5.1.1 Interest rate reference curve

The MCEV© principles state that the reference rate curve can be determined from the swap rate curve, potentially adjusted and especially to enable convergence with the Solvency 2 regulatory requirements. The swap rate curves minus the "credit risk adjustment" in euros and Brazilian reals used for determining the reference rate curves for France, Europe excluding France and Latin America are given in the following table.

	€ RATE	€ RATE	BRL RATE	BRL RATE
MATORITY	31/12/2019	31/12/2018	31/12/2019	31/12/2018
1	- 0.42 %	- 0.33 %	4.22 %	6.35 %
2	- 0.39 %	- 0.28 %	4.92 %	7.06 %
5	- 0.23 %	0.10 %	6.12 %	8.61 %
10	O.11 %	0.73 %	6.63 %	9.02 %
15	0.36 %	1.11 %	6.67 %	8.75 %
20	0.50 %	1.28 %	6.58 %	8.33 %
30	1.20 %	1.85 %	6.35 %	7.59 %
Ultimate forward rate	3.90 %	4.05 %	5.50 %	5.35 %
Point of entry of the extrapolation	20 years	20 years	10 years	10 years
Convergence	40 years	40 years	50 years	50 years

For the Eurozone, the rate curve is extrapolated with an entry point at 20 years which converges on 40 years according to the Smith-Wilson technique, to the ultimate forward rate which comes to 3.90 % (down 0.15 % from 31/12/2018). For Brazil, the entry point is at 10 years and the rate curve converges on 50 years to the ultimate forward rate of 5.50 %.

To determine the reference rate curve, the Group has chosen to align itself with the Solvency 2 prudential regulatory requirements, and adjust the rate swap curve – when allowed – with a credit risk adjustment and a volatility adjustment, in accordance with the prudential regulatory requirements. No matching adjustment has been used for Group entities. The levels of credit risk adjustment and volatility adjustment for different zones within the Eurozone at 31/12/2019 are given in the following table:

Countries	France	Italy	Spain	Ireland	Luxembourg	Cyprus	Brazil
CRA	10	10	10	10	10	10	35
VA	7	7	7	-	7	-	n.a

As a reminder at 31/12/2018 the volatility correction was of 24 bps for Eurozone and the credit risk adjustment of 10 bps. Depending on the requirements of local supervisory authorities, adjustments to rate curves and especially the application of a volatility adjustment is submitted to the supervisory authority in the Solvency 2 context. If the reference curve remains the same per monetary zone, the application of a volatility adjustment depends on local requirements and business and is not routine across the Group.

#### 5.1.2 Calibrating the rate model

The generation model used for nominal rates is based on the two factor Libor Market Model Plus (LMM+). The 10Y ATM swaption volatilities for markets used for calibration are as follows:

Terms	1 year	2 years	5 years	10 years	15 years	20 years	25 years	30 years
MCEV 31/12/2018 (normal)	0.44 %	0.50 %	0.61 %	0.63 %	0.59 %	0.55 %	0.52 %	0.48 %
MCEV 31/12/2019 (normal)	0.46 %	0.48 %	0.53 %	0.57 %	0.56 %	0.54 %	0.52 %	0.50 %

Actual rates are generated by means of the two factor Vasicek mode, which has been calibrated on Treasury bonds indexed on the inflation.

#### 5.1.3 Calibrating the equity model

A different level of volatility for each projection horizon between 1 and 10 years was used to generate the equity index (determinist volatility model). The levels used are given in the following table.

The volatility parameters were calibrated from implied ATM forward volatilities on the Eurostoxx 50 index at 31 December 2019.

Terms	1 year	2 years	5 years	10 years
MCEV 31/12/2018	18.4 %	18.2 %	17.4 %	18.0 %
MCEV 31/12/2019	15.0 %	15.9 %	17.2 %	18.2 %

The correlation coefficients between the different factors (equity, actual interest rates and nominal interest rates) are determined by Moody's Analytics from econometric analyses and experts' opinions.

#### 5.1.4 Calibrating the other diversified index

Two additional diversification index have been calibrated in the projection model : real estate index and Equity Minimum Variance index whose volatilities are 7 % and 13.9 % respectively. The amandement called « Moment Matching Adjustement » is applied to all the diversification index in order to ensure a martingale projection.

#### 5.1.5 Calibrating the corporate credit spread model

In 2015 the CNP Assurances Group added a corporate credit spread diffusion model, the Credit G2 (JLT) model. The model's parameters are calibrated so as to reproduce the spread of an

A rated bond of 7 years maturity (49 bps at 31 December 2019) with the following historic transition matrix:

	AAA	AA	А	BBB	BB	В	ссс	Default
ААА	94.1 %	5.7 %	0.2 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
AA	3.3 %	89.6 %	6.2 %	0.3 %	0.3 %	0.2 %	0.0 %	0.1 %
A	2.2 %	3.4 %	89.2 %	4.1%	0.5 %	0.5 %	0.0 %	0.2 %
BBB	1.8 %	1.8 %	5.2 %	88.1 %	1.5 %	0.6 %	0.6 %	0.4 %
вв	0.1 %	0.7%	1.3 %	6.8 %	82.2 %	6.6 %	0.7 %	1.5 %
В	0.0 %	0.1 %	1.3 %	1.9 %	6.1 %	80.8 %	5.5 %	4.3 %
ссс	0.0 %	0.0 %	0.9%	1.3 %	3.2 %	9.7 %	75.1 %	9.7 %
Default	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	100.0 %

#### 5.1.6 Exchange rate

The following table gives the exchange rates for the CNP Assurances Group business zones outside the Eurozone:

	S	Spot	Avei	age
	31/12/2019	31/12/2018	31/12/2019	31/12/2018
Brazil (BRL / €)	4.5157	4.4440	4.4134	4.3085
Argentina (ARS /€)	67.1949	43.0336	53.8777	32.9896
Norway (NOK / €)	9.8638	9.9483	n.a	n.a
Sweden (SEK∕ €)	10.4468	10.2548	n.a	n.a
Poland (PLN / €)	4.2568	4.3014	n.a	n.a
Denmark (DKK/€)	7.4715	7.4673	n.a	n.a

The spot rate is a period-end rate, it is applied to VIF calculations. The average rate is the average daily rate for the year, it is applied for VNB calculations.

#### 5.1.7 Tax rate

The taxe rate used in the Embedded Value is the standard rate in the country in which Group is operating. The taxe rate is down in France in order to take into account the degration of the corporate taxe in accordance with the finance low of 2017 to 2020. The taxe rate goes to 25 % by 2022. Additionnally, the taxation assumption take into account the impact of reduced tax rates, espacially on unlisted investments in its balance sheet. The table below shows the taxe rates of all the countries of he Group.

Terms	France	Italy	Luxembourg	Spain	Cyprus	Brazil	Argentina	Ireland
MCEV 31/12/2018	22.41 %	30.82 %	26.01 %	25 %	12.50 %	45 %	35 %	12.50 %
MCEV 31/12/2019	17.56 %	30.82 %	26.01 %	25 %	12.50 %	40 % (1)	30 % (2)	12.50 %

(1) The tax rate is 40 % starting from 2019 except for CAIXA Consorcios and Odonto whose tax rate is 34 %.
(2) The tax rate goes to 25 % in 2020 Semester 2.

The tax credits recognised for France enabling the standard tax to be reduced are taken into account.

#### 5.1.8 Cost of capital allocated to residual non-hedgeable risks

The rate applied to capital allocated to non-modelled risks and asymmetrical risks has been set at 5 %. The capital allocated to uncertainty on establishing assumptions suffers a frictional cost.

On average, the rate applied to capital is 4.3 % at 31 December 2019 (2.5 % at 31 December 2018). This increase is explained by a review of the cost of capital for operational and surrender risks in order to better reflect the risks partially taken into account in the MCEV in a changing insurance market environment.

#### 5.1.9 Subordinated securities finance rate

Those cover 70 % (average for the Group) of the solvency Required Capital at 31 December 2019 for the CNP Assurances entity.

## **5.2 NON ECONOMIC ASSUMPTIONS**

#### 5.2.1 Expenses assumptions

Every year-end, the Group produces an analysis of expenses by object: acquisition, management, claims, investment costs and other technical and non technical charges as well as a breakdown by company, product family and network. These expenses bases are then projected by means of relevant drivers. At 31 December 2019, an annual rate of inflation between 1 % and 1.5 % was used for European entities for the drivers not already containing implicit inflation. In Latin America an inflation curve is used in line with the local market situation.

#### 5.2.2 Claims and persistence assumptions

Non-economic assumptions, mortality experience, surrender laws and claims assumptions are determined by each entity on the basis of their best estimate at the date of valuation. They derive from an analysis of actual and past experience seen on each of the portfolios valued.

#### 5.2.3 Future management decisions

The calculation of MCEV metrics needs the incorporation of future management actions. Enabling management of the company to be tailored according to the financial and economic situation, they are represented in particular by the strategies on investment and the revaluation of amounts outstanding and specific actions on liabilities.

Future management actions taken into account in the most unusual environments, such as long-term negative short and long interest rates, were updated in 2019. This new management decisions are based on investment and revaluation strategies applied during 2019, which consisted in reducing the exposure to equity risk and the revalution rate of the contracts



# 6

## Changes in MCEV since 2014

6.1 VNB history (€M and margin rate as %)6.2 MCEV history (€M)

55 56

## 6.1 VNB HISTORY (€M AND MARGIN RATE AS %)



The above graph shows changes over time in the Group's VNB, compiled in accordance with the CFO Forum principles. Since 2014 the VNB has benefitted from pooling the unrealized gains in stock, with use of the marginal method.

## 6.2 MCEV HISTORY (€M)





External opinion on market-consistent embedded value

7

## **EXTERNAL OPINION**

#### CNP ASSURANCES 4 PLACE RAOUL DAUTRY 75716 PARIS CEDEX 15

#### To the Group Financial Director of CNP Assurances

As Statutory Auditors of CNP Assurances and in accordance with your request, we have examined the Market Consistent Embedded Value (MCEV©) information regarding MCEV© and its components, the value of new business, the analysis of movements in MCEV© and MCEV© sensitivities at 31 December 2019 of the CNP Assurances Group (hereinafter referred to as "the MCEV© Information"), presented in the attached document ("Embedded Value Report at 31 December 2019", hereinafter referred to as "the EV Report").

The MCEV© Information and the underlying assumptions upon which the information relies have been established under the responsibility of management of CNP Assurances. The methods and significant assumptions adopted are detailed in the EV Report. We are required, based on our work, to express a conclusion on the consistency of the results of the MCEV© Information with the methodology and assumptions adopted by management, with the MCEV© principles, with the guidance published by the CFO Forum in May 2016, as well as on the consistency of the accounting information used with the consolidated financial statements of CNP Assurances as at 31 December 2019.

Our work, which does not constitute an audit, nor a limited review, has been performed in accordance with the professional standards applicable in France and the professional guidance issued by the French Institute of statutory auditors, and aims at forming a conclusion based on appropriate procedures.

Our work included the following procedures:

- Understanding the process used by management to prepare the MCEV© Information;
- Checking the "market consistent" approach used by management and described in the EV Report, with regards to its consistency with the MCEV© principles and guidance published by the CFO Forum, revised in May 2016;
- Checking the compliance of the methodology applied to establish the MCEV© Information with that described in the EV Report;
- Checking the economic assumptions used and their consistency with observable market data;
- Checking the consistency of the operational assumptions used with regards to past, current and expected future experience;
- Checking the consistency of the results presented in the MCEV© Information with the methodology and assumptions described in the EV Report;

- Checking the consistency of the accounting data used in preparing the MCEV© Information with the annual consolidated financial statements and underlying accounting records at 31 December 2019;
- Obtaining the information and explanations deemed necessary to deliver our conclusion.

We note that the Embedded Value calculation is based on a number of assumptions and expectations, notably regarding future management actions and policyholder's behavior, thus by nature includes an element of uncertainty and might evolve in accordance with the changes of environment. As a result, actual outcomes may differ significantly from those expected in the MCEV© Information. We do not express any conclusion relating to the possibility of such outcomes.

As mentioned in the Embedded Value Report at paragraph 2.1.1, regarding the renewal of agreements in Brazil, we note that the anticipation of payment of 7 bns BRL to be made by CNP Assurances when the transaction will be completed, once approval has been granted by the Brasilian authorities, has been removed from ANAV Mcev at 31 december 2019.

Based on our work, we do not have any observations regarding:

- The consistency of the results of the MCEV© Information at 31 December 2019 as presented in the EV Report with the methodology and assumptions adopted by management, which are consistent with MCEV© principles 1 to 16, with the guidance published by the CFO Forum in May 2016;
- The consistency of the accounting information used with the CNP Assurances Group's consolidated financial statements at 31 December 2019, upon which we expect to issue our audit report at 4th March 2020.

Without modifying our opinion expressed above, we draw attention to sections 2.3.2, 3.2.2, 4.2.2, 5.1.8 et 5.2.3 in the EV Report which explain the changes applied by CNP Assurances to adapt the calculation kernel and a certain number of assumptions in a context of historically low interest rates, including notably the application of the technique of path freezing (PPF) to the diffusion of the stochastic interest rates that feed the model.

This report is governed by the French law.

Neuilly-sur-Seine and Courbevoie, 20 February 2020 PricewaterhouseCoopersAudit / Mazars

Bénédicte Vignon - Eric Demerlé - Olivier Leclerc - Grégory Boutier





## Appendices

Appendix A: Glossary Appendix B: Perimeter 62 64

## **ANNEXE A : GLOSSARY**

#### Adjusted Net Asset Value (ANAV)

Calculated by subtracting from the Group shareholders' equity the subordinated debt classed as shareholders' equity, intangible assets and other components also valued in the Value of In-Force. This indicator is net of minority interests. The Adjusted Net Assets Value are composed of Required Capital and Free Surplus.

#### Annual Premium Equivalent (APE)

Indicator of production volume in the period, being one tenth of the sum of unique premiums and unscheduled payments to which is added the amount of periodic premiums subscribed in the year. This indicator is net of minority interests and net of reinsurance.

#### Frictional Cost of Required Capital (FCRC)

The need to block the Required Capital results in a carry cost to be allocated to the value of the Embedded Value and New Business. In market-consistent modelling, the Frictional Costs are the cost of taxation friction and financial costs related to blocking that capital.

#### Cost of Residual Non-Hedgeable Risks (CRNHR)

The cost allocated as regards non-hedgeable financial and non financial risks results from:

- the inclusion of non valued risks in addition in the PVFP or TVOG such as counterparty default risks and operational risks.
- the asymmetrical impact of certain non-hedgeable risks on value and especially mortality, longevity and morbidity risks included in policyholders' with-profits clauses.
- the uncertainty underlying the establishment of assumptions on non-hedgeable risks concerning claims, surrenders and costs, that are estimated using a "best estimate" approach.

#### **EIOPA**

European Insurance and Occupational Pension Authority.

#### Change at constant exchange rates

In the comparison at constant exchange rates, the exchange rate for the previous period is applied to the current period. This indicator is used to measure changes in the main indicators excluding exchange rate effects.

#### Change at constant perimeter

In the comparison at constant perimeter, the contribution from activities disposed of or ceased is removed from the perimeter of the previous period, and the contribution from new activities is removed from the perimeter of the current period. This indicator is used to measure changes in the main indicators on a comparable perimeter of activity.

#### **Free Surplus**

Is the portion of the Adjusted Net Asset Value that can be freely used by management to pay dividends and develop activity through marketing New Business or by means of external growth operations. This indicator is net of minority interests.

#### IFRS

International Financial Reporting Standards.

#### Market-Consistent Embedded Value (MCEV)

Method of valuing a life insurance company that is broken down into Adjusted Net Asset Value and the Value of In-Force, namely the value insurance policies in portfolio at the date of valuation, determined using a market-consistent asset and liability valuation method. This indicator is net of minority interests.

#### **Operating Free Cash-Flow (OFCF)**

Measures the release of Free Surplus, which can be used to pay dividends and develop activity through marketing New Business or by means of external growth operations. This indicator is net of minority interests. The Operating Free Cash-Flow can be calculated gross or net of issues and repayments of subordinated debt.

#### Solvency Required Capital (SCR)

Level of eligible equity enabling an insurer to absorb significant losses, and give reasonable assurance that commitments to policyholders and beneficiaries will be honoured when they are due. The SCR is defined by the Solvency 2 directive as the value-at-risk of the insurer's basic equity, with a 99.5% level of confidence at a one year horizon. CNP Assurances has opted to calculate its SCR in accordance with a standard formula without transitory measurements, except grandfathering subordinated debt issued before the entry in force of Solvency 2.

#### **Return on MCEV**

Measures the weight of the operating income of the year divided by the adjusted opening MCEV for the past year

#### Margin rate on New Business or APE ratio

Is calculated by dividing the Value of New Business by the APE. This indicator is used to measure the future profitability of insurance policies written in the period

#### TVOG (Time Value of Options and Financial Guarantees)

The time value of options and financial guarantees represents the additional cost of options and guarantees beyond their intrinsic value that is included in the determinist scenario. The time value of costs of options and financial guarantees is calculated by the difference between the average value of future Cash-flows updated using stochastic and determinist scenarios.

#### Ultimate Forward Rate (UFR)

Used to update insurers' long term liabilities (Pensions, death, life assurance, public liability, etc.) in the absence of relevant market data. Beyond the last liquid point (LLP) (20 years in the Eurozone) market rates are extrapolated and converge over a 40 year period on an ultimate rate (the UFR).

#### Value of New Business (VNB)

Assessment of the value of insurance policies written in the period, determined in accordance with a market-consistent asset and liabilities valuation method. It is calculated as the Present Value of Future Profits estimated on insurance policies written in the period, minus the time value of options and financial guarantees, frictional cost of capital and the cost of non-hedgeable risks. This indicator is net of minority interests and tax on profits.

#### Value of In-Force (VIF)

Assessment of the value of insurance policies in portfolio at the date of valuation, determined in accordance with a market-consistent assets and liabilities valuation method. It is calculated as the estimated present value of future profits on insurance policies in portfolio at the date of valuation, minus the time value of options and financial guarantees, frictional cost of capital and the cost of non-hedgeable risks. This indicator is net of minority interests and tax on profits.

## **APPENDIX B: PERIMETER**

GEOGRAPHICAL AREA	COUNTRY	ENTITY	SHARES OWNED
		CNP Assurances	Consolidating Entity
France	-	CNP Caution	100.00 %
France	France	MFPrévoyance	65.00 %
		Arial CNP Assurances	40.00 %
	Brazil	Caixa Seguradora	51.75 % (1)
Latin America	Argentina	CNP Assurances Compañia de Seguros	76.47 %
	Italy.	CNP Unicredit Vita	57.50 %
	Italy	CNP Assurances Italian Branch	100.00 %
	Spain	CNP Partners	100.00 %
Europe excluding France	Luxembourg	CNP Luxembourg	100.00 %
	Cyprus / Greece	CNP Cyprus Insurance Holdings	100.00 % (2)
	Ireland	CNP Santander Insurance	51.00 %

(1) No changes in the Group's perimeter of consolidation occurred during 2018. However, a change of share impacted some perimeters of the Brazil entity (Vida, Prestamista and Previdência) due to the conclusion of a commitment agreement: the share goes from 51.75% to 40%. This change has no imapct on ANAV but only on the VIF of the perimeter JV1.

(2) During 2019, CNP Assurances has strengthened its presence in the Cypriot market following the acquisition from Bank of Cyprus of the remaining 49.9 % stake in CNP Cyprus Insurance Holdings, a 50.1 % subsidiary of CNP Assurances since the end of 2008.

Entities not covered have been valued on the basis of their ANAV.



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