Embedded Value and Solvency II Own Funds

2018

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INTRODUCTION & KEY FIGURES

INTRODUCTION

This report presents the results, methodology and underlying assumptions used to calculate the 2018 Group Eligible Own Funds (EOF)[1], the Life and Savings New Business Value (NBV)[2] and the operating Free Cash Flows (FCF)[3].

The first section is dedicated to the movements in Group EOF, the Group EOF tiering, the sensitivities to a range of financial and technical shocks and the link between Group EOF, Embedded Value and IFRS shareholders' equity. The second section is dedicated to the 2018 new business indicators. The third section is devoted to operating Free Cash Flows by line of business and includes a reconciliation between the expected change in Group EOF and operating Free Cash Flows.

From a methodology stand-point, for Life & Savings, the disclosures are aligned with the EEV principles© from the CFO Forum, which allow the use of the valuation principles applied in the Solvency II balance sheet. For other segments, including "Property and Casualty", "Banking and Asset Managers" and the "Holdings", the disclosures are consistent with the Solvency II valuation principles and are reflective of the Solvency II balance sheet. A detailed methodology is included in the appendices.

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[1] EOF (Eligible Own Funds) corresponds to the surplus derived from the Solvency II balance sheet. It is defined as the excess of market value of assets over market value of liabilities as of valuation date. To align with industry terminology, the previous term AFR (Available Financial Resources) has been replaced by EOF.

[2] NBV (New Business Value) corresponds to the value of newly issued contracts during the current year.

[3] FCF (Free Cash Flows) corresponds to the measure of dividend capacity calculated as the sum of earnings and required capital change.

KEY FIGURES

GROUP KEY FIGURES *Euro billion unless otherwise noted*	2018	2017	Change[1]
Group Solvency II Eligible Own Funds (EOF)	**58.1**	57.8	*0.4*
Group Solvency II ratio	**193%**	205%	*-12pts*
Life & Savings new business value (NBV)	**2.6**	2.8	*-1.1%*
Life & Savings new business value margin (NBV margin)	**39.3%**	43.1%	*-4.2pts*
Life & Savings internal rate of return (IRR)	**18.7%**	16.3%	*2.4pts*
Group Operating Free Cash Flows (FCF)	**6.6**	6.3	*0.3*

[1] At current Forex and scope, except NBV at constant Forex and scope.

2018 Group EOF increased by Euro +0.4 billion driven by a strong operating return and the favorable impact from the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings[1]. This was partly offset by the effect of the acquisition of XL Group[2], as well as dividends to shareholders and unfavorable market impacts.

2018 Group Solvency II ratio decreased by -12 points as a result of (i) the strong operating return of 24 points, (ii) the favorable impact from the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings (mainly from reduced capital requirements reflecting the decrease in ownership) and (iii) the benefit from the purchase of equity hedges, which were more than offset by (iv) the effect of the acquisition of XL Group (mainly from new capital requirements and the loss in EOF[2]), (v) dividend, (vi) the decrease of the Ultimate Forward Rate and (vii) adverse market impacts. This in line with 190% to 200% guidance for 2018, announced on the 5th of March 2018.

2018 Group Operating Free Cash Flows increased by Euro +0.3 billion to Euro 6.6 billion, well on track towards AXA's target of Euro 28 to 32 billion cumulative over 2016 – 2020.

2018 Life & Savings NBV margin decreased by -4.2pts to 39.3% on comparable basis. This decrease in NBV margin was mainly driven by (i) higher sales of Group Health business by AXA France, (ii) higher sales of G/A savings products and a redesign of Protection products in Hong Kong and (iii) unfavorable investment assumptions update at year-end notably in China with lower interest rates.

2018 Life & Savings Internal Rate of Return (IRR) increased from 16.3% to 18.7%, as a result of (i) a shift towards capital-light products mainly in Italy, (ii) Group Life transformation in Switzerland leading to reduced local capital requirements and (iii) productivity gains and improved loss ratios in France and Japan.

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[1] Proceeds from the AXA Equitable Holdings Initial Public Offering in May 2018 and the subsequent sell-down in November 2018 being higher than the corresponding EOF contribution under the US RBC regime.

[2] XL Group acquisition price being higher than the corresponding EOF contribution under the Bermudian regime standard formula.

GROUP ELIGIBLE OWN FUNDS (EOF)

GROUP EOF – ANALYSIS OF CHANGE

Throughout this section, US and XL operations are considered under the equivalence regime[1] and banking and asset management operations under the sectoral rules[2].

The following table presents the evolution of the Group Eligible Own Funds over the indicated period.

GROUP EOF ROLLFORWARD *Euro billion*	L&S	Other than L&S[1]	2018	2017
PREVIOUS CLOSING	**46.9**	**10.9**	**57.8**	**57.9**
Modeling changes and opening adjustments	(3.0)	1.4	(1.7)	(1.5)
OPENING	**43.8**	**12.2**	**56.1**	**56.4**
Expected existing business contribution	3.3	1.1	4.4	4.6
Value of new premiums	1.7	0.3	2.0	2.5
Operating variance and change in assumptions	(0.1)	2.0	1.9	1.5
OPERATING RETURN	**4.9**	**3.4**	**8.3**	**8.5**
Economic variance	(2.7)	(1.0)	(3.7)	1.8
TOTAL RETURN	**2.1**	**2.4**	**4.6**	**10.3**
Exchange rate impact	0.9	(0.2)	0.8	(3.6)
Dividend to be paid in year N+1	-	(3.2)	(3.2)	(3.0)
Subordinated debts and others[2]	(3.9)	3.8	(0.1)	(2.3)
CLOSING	**43.0**	**15.1**	**58.1**	**57.8**

[1] Including P&C, B&AM and holdings; [2]Including subordinated debts, capital movements, internal dividends paid in 2018 and others.

Compared to the opening amount, 2018 Group Eligible Own Funds increased by Euro 2.0 billion to Euro 58.1 billion. The positive expected business contribution, value of new premiums and operating variance were partly offset by unfavorable economic conditions, as well as the proposed dividend to be paid in 2019.

2018 modeling changes and opening adjustments had a negative impact of Euro -1.7 billion, mainly from:

- **The favorable impact from the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings (Euro +0.8 billion)** as cash proceeds were higher than the corresponding EOF contribution under the US RBC regime;
- **The impact of XL Group acquisition (Euro -1.9 billion)** as the purchase price (Euro 12.4 billion) was higher than the corresponding EOF contribution (Euro 10.5 billion) under the

[1] See appendices A.6 "Treatment of insurance subsidiaries in the US" and A.7 "Treatment of XL subsidiaries".

[2] See appendix A.8 "Sectoral rules".

Bermudian regime standard formula. Similar to other P&C entities, XL EOF do not consider future premiums and their related profits emerging from current XL portfolio and new contracts;
- **France (Euro +0.5 billion)** mainly due to model improvements to better reflect (i) profit sharing rules mechanisms and (ii) Group Protection business by extending the projection horizon;
- **Asia (Euro -0.3 billion)** mainly due to the review of contract boundaries modelling for some products in Japan; and
- **Europe (Euro -0.9 billion)** mainly from the transformation of the in-force Swiss Group Life business to a semi-autonomous model and the transfer of reserves to occupational benefits foundations.

2018 Expected existing business contribution was Euro 4.4 billion, of which Euro 3.3 billion from Life & Savings and Euro 1.1 billion from other segments, reflecting the unwind at reference rates, the release of time value of options and guarantees, the release of Risk Margin[1] and the financial over-performance (above reference rates) expected under management case assumptions at the end of 2017.

2018 Value of new premiums amounted to Euro 2.0 billion, of which Euro 1.7[2] billion from Life & Savings and Euro 0.3 billion from Property & Casualty, which reflects adverse impacts in the US from Hurricane Michael, California wildfires and large losses in the fourth quarter.

2018 Operating variance and assumption changes had an impact of Euro 1.9 billion, mainly driven by:

- **Europe (Euro +1.3 billion)** mainly from (i) more favorable best estimate claims reserves in P&C in Switzerland, (ii) an update of assumptions for pensions in Switzerland and the United Kingdom and (iii) a strong reduction of the risk margin in the United Kingdom following the cession of a P&C long-tail reserves portfolio; and
- **France (Euro +0.5 billion)** with more favorable best estimate claims reserves in P&C, partly offset by slightly higher projected expenses in L&S.

2018 operating return was 15% of opening Group EOF or Euro 8.3 billion (15% or Euro 8.5 billion in 2017), driven by a strong expected contribution of existing business and favorable operating variance and assumption changes.

2018 Economic variance was Euro -3.7 billion, mainly due to:

- Euro -2.6 billion from equity performance;
- Euro -0.8 billion from the decrease in interest rates;
- Euro -1.5 billion from the increase in corporate spreads;
- Euro -0.9 billion from the increase in government spreads;
- Euro 1.8 billion from the increase in volatility adjuster following increase in spreads; and

[1] Risk Margin (RM) is the present value of the cost of future economic capital requirements for non-hedgeable risks. The RM is a part of the market-consistent value of liabilities. To align with industry, MVM (Market Value Margin) terminology has been replaced by RM.

[2] Differences between Life & Savings value of new premiums and Life and Savings New Business Value come from: the application of contract boundaries, the cost of capital and non-financial risks (which replaces in the NBV the risk margin reflected in the value of new premiums) and equivalence treatment for US operations.

- Euro 0.4 billion from lower volatilities.

2018 total return was 8% or Euro 4.6 billion (18% or Euro 10.3 billion in 2017) driven by a strong operating return partly offset by an unfavorable economic variance.

2018 changes in exchange rate had an impact of Euro 0.8 billion, from the appreciation of main currencies versus the Euro.

2018 proposed dividend to be paid in 2019 amounts to Euro -3.2 billion.

2018 subordinated debts and others had an impact of Euro -0.1 billion as a result of (i) Euro +2.0 billion of Tier 2 subordinated debt issuance at AXA SA offset by (ii) Euro -0.6 billion Restricted Tier 1 undated debt reimbursement at AXA SA and (iii) Euro -1.2 billion of XL debt reimbursement in the last quarter.

GROUP SII RATIO – ANALYSIS OF CHANGE

The following table presents the evolution of the Group Solvency II Ratio over the indicated period.

GROUP SOLVENCY II RATIO ROLL-FORWARD *Euro billion*	**Group EOF 2018**	**Group SCR 2018**	**SII ratio 2018**
PREVIOUS CLOSING	**57.8**	**28.2**	**205%**
Operating return[1]	8.3	0.7	24%
Economic variance[2]	(3.7)	(1.2)	-4%
Dividend to be paid in year N+1	(3.2)	-	-12%
Subordinated debt, buyback, forex & other[3]	(1.0)	2.4	-20%
CLOSING	**58.1**	**30.2**	**193%**

[1] Operating return is the sum of (i) expected existing business contribution, (ii) Value of new premiums and (iii) Operating variance and change in assumptions
[2] Economic variance reflects the experience variance observed over the current year and the management case scenario
[3] Scope and model changes

2018 Group Solvency II ratio[1] decreased by **-12 points** as a result of:

2018 Operating return of +24 points.

2018 Economic variance of -4 points mainly due to unfavorable equity performance and spreads widening.

2018 Proposed dividend to be paid in 2019 of Euro 3.2 billion or **-12 points**.

2018 Subordinated debt and other of **-20 points** mainly reflects:

- **+13 points** due to the favorable impact from the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings (Euro +0.8 billion impact on EOF and capital release of Euro -1.1 billion on Group SCR reflecting the decrease in ownership);
- **-48 points** from the acquisition of XL Group (Euro -1.9 billion on EOF and additional capital requirement of Euro +5.6 billion on Group SCR); and
- **+15 points** from de-risking initiatives notably with the purchase of equity hedges and the cession of a P&C long-tail reserves portfolio in the United Kingdom.

The year-end Solvency II ratio is in line with 190% to 200% guidance for 2018, announced on the 5th of March 2018.

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[1] The Solvency II ratio is estimated primarily using AXA's internal model calibrated based on an adverse 1/200 years shock and assuming equivalence for AXA Equitable Holdings in the US. For further information on AXA's internal model and Solvency II disclosures, please refer to AXA Group's SFCR for FY17, available on AXA's website (www.axa.com). As in previous disclosures all AXA US entities are taken into account assuming US equivalence. The contribution to the AXA Group Solvency II ratio from the entities that were part of the XL Group ("XL entities") as at December 31, 2018 was calculated in accordance with the equivalence regime, based on the Bermudian Standard Formula SCR, plus a 5% add-on required by the AXA's lead supervisor (ACPR), as a transitional measure. In compliance with the decision from ACPR, XL entities will be fully consolidated for Solvency II purposes (as per the consolidation-based method set forth in the Solvency II Directive) and their contribution to the Group's Solvency capital requirement will be calculated using the Solvency II standard formula from March 31, 2019. Subject to prior approval of the ACPR, the Group intends as soon as FY 2020 to extend its Internal Model to XL entities.

GROUP EOF – TIERING

The structure of tiering is presented in the table below:

EOF TIERING *Euro billion*	Total	Unrestricted Tier 1	Restricted Tier 1	Tier 2	Tier 3
EOF (Eligible own fund) At Dec. 31, 2018	**58.1**	**38.3**	**6.9**	**11.9**	**1.0**
of which insurance sector	55.0	35.2	6.9	11.9	1.0
Of which ancillary	-	-	-	-	-
Of which subject to transitional measures*	11.5	-	6.9	4.6	-
of which other financial sectors	3.1	3.1	-	-	-
EOF (Eligible own fund) At Dec. 31, 2017	**57.8**	**41.7**	**7.5**	**7.7**	**0.9**
of which insurance sector	55.4	39.4	7.5	7.6	0.9
Of which ancillary	-	-	-	-	-
Of which subject to transitional measures*	12.1	-	7.5	4.6	-
of which other financial sectors	2.3	2.3	-	0.0	-

* Transitional measures on basic own funds apply on subordinated debts eligible under Solvency 1 regulation, these subordinated debts are also eligible under Solvency 2 until 2026.

The various components that AXA Group considers as eligible capital are determined in accordance with Solvency II regulatory requirements. As at December 31st, 2018, eligible capital amounted to Euro 58.1 billion (Euro 57.8 billion at December 31st, 2017), of which:

- Unrestricted Tier 1 capital after dividend proposal: Euro 38.3 billion (Euro 41.7 billion at December 31, 2017), mainly composed of ordinary shares, reconciliation reserve[1], and excluding undated subordinated debt;
- Restricted Tier 1 capital: Euro 6.9 billion of undated subordinated debt (Euro 7.5 billion at December 31, 2017);
- Tier 2: Euro 11.9 billion of dated subordinated debt and Tier 2 XL debts (Euro 7.7 billion at December 31, 2017); and
- Tier 3: net deferred tax assets of Euro 1.0 billion (Euro 0.9 billion at December 31, 2017).

AXA US and XL entities are considered assuming equivalence regime as described in appendices A.6 and A.7.

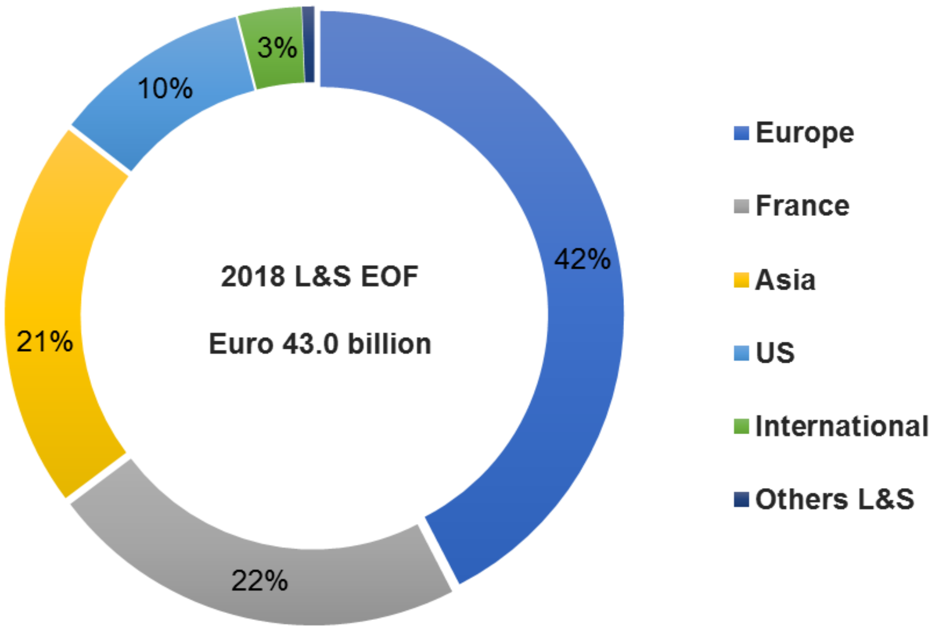
The change in Group Eligible Own Funds by tier in 2018 is driven by:

- Euro -3.4 billion decrease in unrestricted Tier 1, driven by XL unrestricted Tier 1 contribution, unfavorable economic variance and dividend payment. This was partly offset by a strong operating performance;
- Euro -0.6 billion decrease in restricted Tier 1 driven by the reimbursement of undated debt;
- Euro +4.2 billion increase in Tier 2 driven by (i) Euro +2.0 billion subordinated debt issuance and (ii) Euro +2.2 billion XL Tier 2 contribution; and
- Euro +0.1 billion increase in Tier 3.

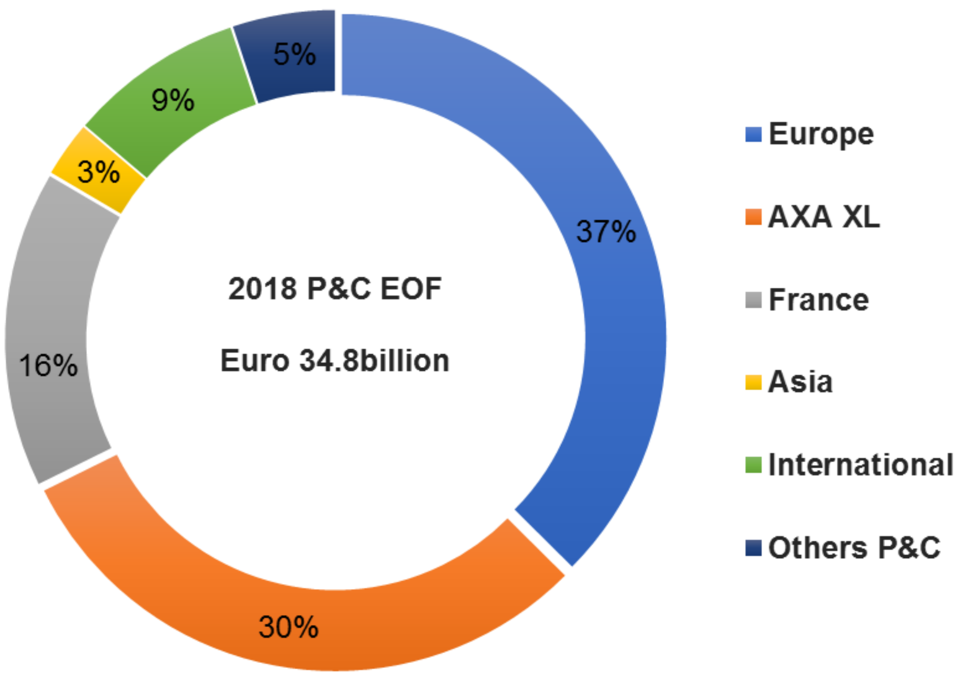
[1] Reconciliation reserve represents the excess of assets over liabilities from the Solvency II balance sheet, reduced by capital items in the financial statements (share capital, capital in excess of nominal value excluding subordinated debts) and net of foreseen dividend to be paid.

GROUP EOF – BY GEOGRAPHY AND BY SEGMENT

L&S EOF - BREAKDOWN BY GEOGRAPHY



P&C EOF - BREAKDOWN BY GEOGRAPHY



GROUP EOF – SENSITIVITIES

The following table presents the sensitivities of the Life & Savings EOF of AXA to various financial and technical shocks.

LIFE & SAVINGS EOF SENSITIVITIES	2018 EOF in Euro million	2018 EOF in percentage	2017 EOF in Euro million	2017 EOF in percentage
CLOSING AMOUNT	**43 034**	**100%**	**46 884**	**100%**
Interest rates +50bps	1 316	3%	773	2%
Interest rates -50bps	(2 283)	(5%)	(1 193)	(3%)
Equity markets +25%	1 945	5%	1 618	3%
Equity markets -25%	(2 766)	(6%)	(2 944)	(6%)
Real estate +10%	818	2%	964	2%
Real estate -10%	(814)	(2%)	(995)	(2%)
Policyholder lapses -10%	246	1%	62	0%
Expenses -10%	1 276	3%	1 274	3%
Annuity business mortality -5%	(228)	(1%)	(243)	(1%)
Life business mortality -5%	433	1%	240	1%
Equity volatility +25%	(338)	(1%)	(265)	(1%)
Interest rate volatility +25%	(1 156)	(3%)	(1 137)	(2%)
Credit spreads +50bps[1]	(1 401)	(3%)	(1 545)	(3%)
Credit spreads -50bps[1]	873	2%	1 308	3%
Volatility adjustment = 0bps	(2 528)	(6%)	(599)	(1%)
Volatility adjustment +10bps	1 224	3%	1 094	2%
UFR -15bps	(256)	(1%)	(217)	(0%)

[1]Assuming volatility adjustment remains constant

Life & Savings EOF is positively sensitive to an increase in interest rates as (i) investment margins improve when policyholder's guarantees are less in the money, and as (ii) asset duration is lower than liability duration. This gross positive sensitivity is partly offset by profit sharing and dynamic lapses mechanisms, which are causing asymmetry with regards to sensitivity to a decrease in interest rates.

In these Life & Savings EOF sensitivities, US operations are reflected under the equivalence regime at year-end group share.

The main changes in Group Eligible Own Funds sensitivities in 2018 are:

- Interest rate sensitivity increased due to the reduction in ownership of AXA Equitable. Their Own funds under equivalence regime are increasing with the drop of interest rates, offsetting the rest of the Group.
- Removal of volatility adjustment increased as a result of a higher VA in 2018 compared to 2017.

The following table presents the sensitivities of the Property & Casualty EOF of AXA to various financial shocks.

P&C EOF SENSITIVITIES	2018 EOF in Euro million	2018 EOF in percentage	2017 EOF in Euro million	2017 EOF in percentage
CLOSING AMOUNT	**34 772**	**100%**	**24 745**	**100%**
Interest rates +50bps	(139)	0%	(63)	0%
Interest rates -50bps	182	1%	73	0%
Equity markets +25%	1 106	3%	936	4%
Equity markets -25%	(881)	-3%	(877)	-4%
Real estate +10%	633	2%	568	2%
Real estate -10%	(633)	-2%	(568)	-2%
Credit spreads +50bps[1]	(1 152)	-3%	(728)	-3%
Credit spreads -50bps[1]	1 230	4%	820	3%
Volatility adjustment = 0bps	(404)	-1%	(93)	0%
Volatility adjustment +10bps	208	1%	215	1%
UFR -15bps	(5)	0%	(15)	0%

[1]Assuming volatility adjustment remains constant

Property & Casualty EOF sensitivity changes are mainly driven by the integration of XL Group.

LINKING IFRS SHAREHOLDERS' EQUITY TO GROUP EOF

The following table presents the reconciliation between IFRS Shareholders' equity to Group EOF.

RECONCILIATION IFRS SHAREHOLDERS' EQUITY TO EOF *Euro billion*	**L&S**	**Other than L&S**[3]	**2018**	**2017**
IFRS SHAREHOLDERS' EQUITY[1]	**52.5**	**9.9**	**62.4**	**69.6**
Net URCG not included in Shareholders' Equity	1.1	4.1	5.1	4.8
Elimination TSS/TSDI	-	(6.8)	(6.8)	(7.4)
Elimination Intangibles	(17.0)	(18.5)	(35.5)	(31.2)
o/w Goodwill	*(4.0)*	*(12.7)*	*(16.7)*	*(14.3)*
o/w DAC	*(11.3)*	*(2.1)*	*(13.4)*	*(13.3)*
o/w VBI	*(1.1)*	*(0.6)*	*(1.7)*	*(1.5)*
o/w others	*(0.6)*	*(3.1)*	*(3.7)*	*(2.1)*
IFRS TANGIBLE NET ASSET VALUE[1]	**36.5**	**(11.3)**	**25.3**	**35.8**
Dividends to be paid	-	(3.2)	(3.2)	(3.0)
Technical provision adjustments	6.9	5.1	12.0	9.4
o/w Risk Margin	*(7.3)*	*(2.0)*	(9.3)	*(9.7)*
o/w BEL	*14.3*	*7.1*	21.4	*19.1*
Other adjustments	(1.2)	5.4	4.2	(0.5)
UNRESTRICTED TIER 1	**42.3**	**(4.0)**	**38.3**	**41.7**
Restricted Tier 1 + Tier 2	0.1	18.8	18.8	15.1
Tier 3	0.7	0.3	1.0	0.9
GROUP ELIGIBLE OWN FUNDS[2]	**43.0**	**15.1**	**58.1**	**57.8**

[1] Group share; [2] Including minority interests; [3] Including P&C, B&AM and holdings.

The main elements of the reconciliation from the Euro 62.4 billion of IFRS shareholders' equity to the Euro 25.3 billion of IFRS TNAV are as follows:

- Addition of Euro 5.1 billion of net unrealized gains and losses on assets not reflected in IFRS shareholders' equity;
- Deduction of Euro 6.8 billion of undated deeply subordinated notes (TSS) and of undated subordinated notes (TSDI) included in IFRS shareholders' equity; and
- Elimination of Euro 35.5 billion of intangible assets net of unearned revenues and fee reserves, taxes and policyholder bonuses.

IFRS TNAV decreased by Euro 10.5 billion mainly due to the fact that it excludes additional intangibles linked to the acquisition of XL Group. This metric however reflects the IFRS accounting value of liabilities and not their economic value which is better reflected within Solvency II EOF.

The main elements of the reconciliation between the IFRS TNAV and the Group EOF Unrestricted Tier 1 are as follows:

- Deduction of Euro 3.2 billion of foreseeable dividends to be paid to shareholders in 2019;
- Addition of Euro 12.0 billion reflecting the Solvency II technical provision adjustments corresponding to the adjustment from IFRS reserves to best estimate liabilities (Euro +21.4 billion) and the risk margin (Euro -9.3 billion); and
- Other adjustments between IFRS TNAV and Group EOF Unrestricted Tier 1 (Euro +4.2 billion), notably the treatment of XL insurance subsidiaries under the equivalence regime Euro 4.4 billion.

Group EOF are then the sum of unrestricted Tier 1, restricted Tier 1, Tier 2 and Tier 3.

LIFE & SAVINGS EEV – BREAKDOWN BY GEOGRAPHY

The following table presents the EEV breakdown by geography.

EEV *Euro billion*	France	United States	Europe	Asia	International	Others	2018	2017
L&S EEV	**14.1**	**4.2**	**19.3**	**13.7**	**1.7**	**0.3**	**53.3**	**59.1**

2018 Life & Savings EEV amounted to Euro 53.3 billion. The decrease is mainly due to the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings and in Europe due to transformation of the in-force Swiss Group Life business to a semi-autonomous model and the transfer of reserves to occupational benefits foundations.

LIFE & SAVINGS – FUTURE PROFITS INCLUDED IN EOF

The following table shows the components of future profits for Life and Savings, which are only partially reflected in EOF. This table updates for 2018 the information presented at the AXA Investor Day on November 14th, 2017, page 41.

L&S EEV to L&S Solvency II future profits included in EOF *Euro billion*	2018	2017
L&S EEV	**53.3**	**59.1**
L&S CE PVFP (RN discounted future profits)	**33.3**	**37.1**
TVOG	(5.9)	(5.5)
L&S VIF (before EEV Cost of Capital)	**27.4**	**31.5**
RM	(7.3)	(7.3)
BoC impact	(6.7)	(7.4)
Other adjustments	1.4	(0.7)
L&S Solvency II future profits included in EOF	**14.8**	**16.2**

The difference between **Life & Savings in-force risk-neutral discounted future profits** (Euro 33.3 billion) and **Life & Savings in-force future profits included in the Solvency II EOF** (Euro 14.8 billion) corresponds to four elements:

- Inclusion of Time Value of Options and Guarantees (Euro -5.9 billion), representing the cost for shareholders associated with financial guarantees and options;
- Removal of Risk Margin (Euro -7.3 billion), which is a Solvency II prudential element;
- Removal of Solvency II contract boundaries application (Euro -6.7 billion), which is a Solvency II prudential element; and
- Other adjustments (Euro +1.4 billion), reflecting Solvency II specificities such as the inclusion of Surplus Funds in Germany.

Time Value and Option and Guarantees slightly increased due to higher implied volatilities in Asia, notably in Honk Kong.

Risk Margin is stable.

Solvency II contract boundaries impact decreased following the transformation of Swiss Group Life in-force business to a semi-autonomous model, which was subject to boundaries of contracts limitation.

LINKING GROUP EMBEDDED VALUE TO GROUP EOF

RECONCILIATION GROUP EV TO GROUP EOF *Euro billion*	**L&S**	**Other than L&S[3]**	**2018**	**2017**
GROUP EMBEDDED VALUE[1]	**53.3**	**(11.3)**	**42.0**	**55.2**
Dividends to be paid	-	(3.2)	(3.2)	(3.0)
TSS/TSDI, subordinated debt and XL eligible debts	0.1	19.6	19.7	15.1
Adjustment from IFRS reserves to BEL in P&C	-	7.1	7.1	5.7
Solvency II prudential margins	(12.9)	(2.0)	(14.9)	(15.9)
o/w RM	*(7.3)*	(2.0)	*(9.3)*	*(9.7)*
o/w CoC/NFR	*1.1*	-	*1.1*	*1.2*
o/w Solvency II contract boundaries limitation in L&S	*(6.7)*	-	*(6.7)*	*(7.4)*
Other framework differences	2.5	4.8	7.4	0.6
GROUP ELIGIBLE OWN FUNDS[2]	**43.0**	**15.1**	**58.1**	**57.8**

[1]Group Share; [2]Including minority interests; [3]Including P&C, B&AM and holdings.

The difference between Group EOF and Group EV is mostly linked to the inclusion of subordinated debts and Solvency II prudential margins in Group EOF, and the treatment of P&C reserves.

In contrast with Group EV, the proposed 2018 dividend to be paid in 2019 is deducted from Group EOF (Euro -3.2 billion), while subordinated debt is included (Euro +19.7 billion).

The increase in eligible debts in 2018 reflects (i) the issuance of subordinated debts partly offset by reimbursement of undated debts and (ii) XL eligible debts contribution.

Group EOF captures the best estimate value of P&C liabilities, whilst Group EV reflects the full amount of IFRS P&C reserves. IFRS P&C reserves at FY18 were higher than the best estimate value of P&C liabilities by Euro +7.1 billion and so this adjustment has a net positive impact on Group EOF.

Group EOF includes Solvency II prudential margins (Euro -14.9 billion): (i) the risk margin of Euro -9.3 billion, which replaces the Cost of Capital and Non-Financial Risks applied under the EEV framework (Euro +1.1 billion) and (ii) the contract boundaries limitation of Euro -6.7 billion. These margins are expected to be released over time in the form of additional operating performance.

Group EOF includes other framework differences with Group EV (Euro +7.4 billion), such as the inclusion of Surplus Funds in Germany, the treatment of US and XL insurance operations under the equivalence regime and the application of sectoral rules to Banking and Asset Management businesses.

LIFE & SAVINGS NEW BUSINESS AND IN FORCE FUTURE PROFITS

LIFE & SAVINGS NEW BUSINESS – KEY FIGURES

The following table presents the key Life & Savings new business indicators and the evolution of the new business value over the indicated periods.

NEW BUSINESS METRICS *Euro million, Group share*	**2017**	**2018**	Change[1]
Regular premiums	3 688	4 035	*13%*
Single premiums	27 825	25 960	*4%*
APE	**6 470**	**6 631**	***9%***
PVEP	**64 488**	**67 019**	***9%***
NBV	**2 787**	**2 607**	***-1%***
o/w CE PVFP less strain	*3 262*	*3 073*	0%
o/w Time Value of O&G	*(409)*	*(425)*	11%
o/w CoC/NFR	*(65)*	*(41)*	-30%
NBV/APE	**43.1%**	**39.3%**	***(4.2pts)***
NBV/PVEP	**4.3%**	**3.9%**	***(0.4pt)***
NEW BUSINESS IRR	**16.3%**	**18.7%**	***2.4pts***

LIFE & SAVINGS NBV ANALYSIS OF CHANGE *Euro million, Group share*	**Total**
2017 LIFE & SAVINGS NBV	**2 787**
Modeling changes & other adjustments	(0)
Change in scope and acquisitions	(81)
Foreign exchange impact	(62)
Business-driven evolution:	(38)
o/w Volume	*286*
o/w Business mix	*(267)*
o/w Expenses	*(21)*
o/w Investment assumptions	*(46)*
o/w Actuarial assumptions & others	*10*
2018 LIFE & SAVINGS NBV	**2 607**

[1] Comparable basis: constant scope for IRR, and constant Forex & scope for other indicators.

2018 Life & Savings new business APE increased by 9% on comparable basis. APE evolution by country is commented in detail in the 2018 Activity Report.

2018 Life & Savings regular premiums increased by +13% on comparable basis, in line with AXA's strategy to grow in the Protection and Health segments.

2018 Life & Savings single premiums up by +4% on comparable basis.

2018 Life & Savings present value of expected premiums (PVEP) grew by +9% on comparable basis.

2018 Time Value of Options and Guarantees (TVOG) increased by 11%, following higher sales of G/A Savings products with profit sharing in Hong Kong.

LIFE & SAVINGS NBV ANALYSIS OF CHANGE		France	United States	Europe	Asia	Interna-tional	Total
2017 LIFE & SAVINGS NBV		**637**	**421**	**585**	**1 066**	**78**	**2 787**
Modeling changes & other adjustments		57	-	(55)	2	(5)	(0)
Change in scope and acquisitions		(0)	(81)	0	(0)	0	(81)
Foreign exchange impact		(0)	(15)	(6)	(39)	(2)	(62)
Business-driven evolution:		(36)	13	45	(83)	24	(38)
o/w Volume		132	*19*	*24*	*114*	*(3)*	286
o/w Business mix		(146)	*(23)*	*12*	*(136)*	*26*	(267)
o/w Expenses		*(11)*	*(11)*	*(5)*	*6*	*(1)*	*(21)*
o/w Investment assumptions		*(25)*	*25*	*(1)*	*(44)*	*(1)*	*(46)*
o/w Actuarial assumptions & others		*13*	*4*	*15*	*(24)*	*3*	*10*
2018 LIFE & SAVINGS NBV		**659**	**338**	**569**	**945**	**95**	**2 607**
o/w CE PVFP less strain		*753*	*396*	*633*	*1 191*	*100*	*3 073*
o/w Time Value of O&G		*(94)*	*(45)*	*(61)*	*(225)*	*(1)*	*(425)*
o/w CoC/NFR		*(0)*	*(13)*	*(4)*	*(20)*	*(4)*	*(41)*
LIFE & SAVINGS APE *Euro million, Group share*	**2018**	2 232	1 471	1 146	1 520	262	6 631
	2017	1 849	1 799	1 034	1 510	278	6 470
	Change [1]	*21%*	*6%*	*4%*	*5%*	*-2%*	*9%*
LIFE & SAVINGS NBV MARGIN	**2018**	29.5%	23.0%	49.6%	62.2%	36.5%	39.3%
	2017	34.5%	23.4%	56.6%	70.6%	28.0%	43.1%
	Change [1]	*(5.0pts)*	*(0.4pts)*	*(3.6pts)*	*(7.4pts)*	*7.9pts*	*(4.2pts)*
LIFE & SAVINGS IRR	**2018**	24.8%	15.0%	21.4%	16.9%	19.6%	18.7%
	2017	22.0%	15.2%	20.0%	15.1%	6.2%	16.3%
	Change [1]	*2.7pts*	*(0.2pts)*	*1.3pts*	*1.9pts*	*13.4pts*	*2.4pts*

[1]Comparable basis: constant scope for IRR, and constant Forex & scope for other indicators.

2018 Life & Savings NBV dropped by 1% to Euro 2,607 million on a comparable basis.

Modeling changes had a neutral impact on Life & Savings NBV:

- **France** (Euro +57 million) due to model refinement in the Group Protection business; almost offset by
- **Europe** (Euro -55 million), mainly driven by the impact on modelling of the Swiss Group Life business transformation and model correction in Germany.

Change in scope had an impact of Euro -81 million as a result of the Initial Public Offering and the subsequent sell down of AXA Equitable Holdings.

Foreign Exchange had an impact of Euro -62 million, reflecting the appreciation of the Euro versus USD, HKD and JPY.

Business-driven evolution had an impact of Euro -38 million on Life & Savings NBV:

- **Volume evolution** had an impact of Euro +286 million on the NBV, mainly driven by:
  - **France** (Euro +132 million) due to increased sales of the international Group Health business; and
  - **Asia** (Euro +114 million) reflecting the high volume sold in Japan due to the new Protection product.

- **Business mix** had an impact of Euro -267 million on Life & Savings NBV, mainly driven by:
  - **France** (Euro -146 million) due to higher share of the Group Health business; and
  - **Asia** (Euro -136 million) coming from Japan due to strong sales of a new Protection product with relatively lower margin and Hong Kong due to increased volume in G/A Savings and a redesign of Protection products, partially offset by improved business mix in China and Thailand.

- **Expenses evolution** had an impact of Euro -21 million on Life & Savings NBV, mainly driven by:
  - **France** (Euro -11 million) due to higher expenses in Protection, partly offset by productivity gains in G/A Savings; and
  - **United States** (Euro -11 million) due to increased unit cost assumptions.

- **Investment assumptions' unfavorable update** had an impact of Euro -46 million on Life & Savings NBV, mainly due to:
  - **Asia** (Euro -44 million), mainly driven by lower interest rates in China; and
  - **France** (Euro -25 million), mainly driven by lower interest rates and equity return, partly offset by lower volatilities and good real estate performance; offset by
  - **United States** (Euro +25 million) caused by higher interest rate levels, leading to higher locked-in margins from hedging strategies on GMxB products.

- **Actuarial assumptions & other updates** had an impact of Euro +10 million on Life & Savings NBV, mainly due to:
  - **Europe** (Euro +15 million), mainly driven by favorable lapse assumption update in Germany;
  - **France** (Euro +13 million), mainly driven by improved loss ratios in Group Health, partially offset by higher loss ratios in Group Protection; offset by
  - **Asia** (Euro -24 million), due to an unfavorable change in lapse assumptions.

Life & Savings NBV margin decreased by -4.2pts to 39.3% on comparable basis. This decrease in NBV margin was mainly driven by (i) higher sales of Group Health business by AXA France, (ii) higher sales of G/A savings products and a redesign of Protection products in Hong Kong and (iii) unfavorable investment assumptions update at year-end notably in China with lower interest rates.

Life & Savings Internal Rate of Return (IRR) increased from 16.3% to 18.7%, with the following main variations:

- **France** (+2.7 pts) due to productivity gains in G/A Savings, lower acquisition expenses in Unit Linked and improved loss ratios in Group Health;

- **United States** (-0.2 pts) mainly due to business mix;

- **Europe** (+1.3 pts) mainly driven by Switzerland, in which the transformation of the Group Life business has led to reduced capital requirements, and Italy due to favorable business mix towards capital-light products;

- **Asia** (+1.9 pts) mainly driven by Japan with productivity gains in Protection; and

- **International** (+13.4 pts) mainly due to improved business mix in Singapore.

LIFE & SAVINGS NEW BUSINESS – SENSITIVITIES

The following table presents the sensitivities to various financial and technical shocks of the Life & Savings NBV of AXA.

LIFE & SAVINGS NBV SENSITIVITIES	2018 NBV *in Euro million*	2018 NBV *in percentage*
CLOSING AMOUNT	**2 607**	**100%**
Interest rates +50bps	56	+2%
Interest rates -50bps	(94)	-4%
Equity markets +25%	177	+7%
Equity markets -25%	(183)	-7%
Real estate +10%	14	+1%
Real estate -10%	(20)	-1%
Policyholder lapses -10%	196	+8%
Expenses -10%	130	+5%
Annuity business mortality -5%	(1)	-0%
Life business mortality -5%	85	+3%
Equity volatility +25%	(25)	-1%
Interest rate volatility +25%	(86)	-3%
Credit spreads +50bps [1]	(41)	-2%
Credit spreads -50bps [1]	32	+1%
Volatility adjustment = 0bps	(119)	-5%
Volatility adjustment +10bps	27	+1%
UFR -15bps	(15)	-1%

[1] Assuming volatility adjustment remains constant

LINKING LIFE & SAVINGS NEW PREMIUM VALUE TO NBV

The following table presents the link between the Life & Savings Value of New Premiums and the Life & Savings New Business Value.

L&S Solvency II Value of New Premiums to L&S NBV *Euro billion*	**2018**
L&S Solvency II Value of new premiums	**1.7**
RM	0.6
BoC impact	0.1
Other adjustments	0.3
NBV CoC/NFR	(0.0)
L&S NBV	**2.6**

The difference between the Life & Savings Value of New Premiums included in the Solvency II EOF (Euro 1.7 billion) and the Life & Savings NBV (Euro 2.6 billion) corresponds to four elements:

- Removal of Risk Margin (Euro +0.6 billion), which is a Solvency II prudential element;
- Removal of Solvency II contract boundaries application, (Euro +0.1 billion), which is a Solvency II prudential element;
- Other adjustments (Euro +0.3 billion), reflecting the inclusion of the US, which is under the equivalence regime within Solvency II; and
- Inclusion of Cost of Capital and Non-Financial Risks applied under the EEV framework (Euro -0.0 billion), which replace the Risk Margin.

GROUP OPERATING FREE CASH FLOWS

GROUP OPERATING FREE CASH FLOWS

2018 Group Operating Free Cash Flows increased by Euro +279 million to Euro 6,571 million.

OPERATING FREE CASH FLOWS *Euro million, Group share*	France	United States	Europe	Asia	Inter-national	AXA XL	Others	2018	2017
Life & Savings	834	538	997	405	42		16	2 832	3 035
Property & Casualty	564	0	2 359	48	275	(201)	66	3 111	2 659
Bank & Asset management	(2)	271	6	0	83		270	628	598
Total	**1 397**	**809**	**3 362**	**453**	**399**	**(201)**	**352**	**6 571**	**6 292**

LIFE & SAVINGS OPERATING FREE CASH FLOWS

This section presents the Life & Savings Operating Free Cash Flows by country and by component (expected statutory earnings and expected change in required capital).

OPERATING FREE CASH FLOWS L&S *Euro million, Group share*	2018	2017
L&S EXPECTED STATUTORY EARNINGS	**2 691**	**3 034**
o/w L&S Expected existing business earnings	3 919	4 402
o/w L&S New business strain	(1 228)	(1 368)
L&S EXPECTED CHANGE IN REQUIRED CAPITAL	**141**	**2**
o/w L&S Expected existing business change in required capital	475	457
o/w L&S New business required capital	(335)	(456)
TOTAL L&S OPERATING FREE CASH FLOWS	**2 832**	**3 035**

2018 Life & Savings Operating Free Cash Flow decreased by Euro -203 million to Euro 2,832 million. These cash flows were estimated based on management's expectations of future economic conditions as of the previous closing date, as detailed in the appendices of the 2017 Embedded Value and EOF report.

- **Expected Statutory earnings** were assumed to decrease by Euro -342 million to Euro 2,691 million, mainly driven by:
  - **United States** (Euro -238 million), reflecting lower ownership following the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings;
  - **France** (Euro -89 million), due to the non-repeat of exceptional release of reserves on Group Pension contracts in 2017;
  - **Europe** (Euro -73 million), mainly reflecting lower expected existing business contribution from Switzerland due to lowered tariff; and
  - **Asia** (Euro +56 million), mainly driven by Japan due to tariff increase on existing business.

- **Expected change in required capital** was assumed to be favorable by Euro +139 million to Euro 141 million, mainly driven by the effect of the Initial Public Offering and the subsequent sell-down of AXA Equitable Holdings.

PROPERTY & CASUALTY, BANKING AND ASSET MANAGEMENT OPERATING FREE CASH FLOWS

This section presents Free Cash Flows for the Property & Casualty, Bank and Asset Management segments.

OPERATING FREE CASH FLOWS P&C and B&AM *Euro million, Group share*	**2018**		**2017**	
	P&C	**B&AM**	**P&C**	**B&AM**
Earnings contribution[1]	2 839	628	2 755	598
Change in required capital	272	-	(96)	-
TOTAL P&C and B&AM OPERATING FREE CASH FLOWS	**3 111**	**628**	**2 659**	**598**

[1]IFRS Underlying Earnings including Realized Capital gains.

2018 Property & Casualty Operating Free Cash Flows increased by Euro +453 million to Euro 3,111 million:

- **Earnings contribution increased by Euro +85 million to Euro 2,839 million,** mainly due to higher realized capital gains brought about by the reduction of equity exposure in Europe. The evolution of earnings is commented in detail in the 2018 Activity Report.
- **Change in required capital increased by Euro +368 million to Euro 272 million** due to the strong capital release from the cession of a P&C long-tail reserves portfolio in United Kingdom and lower capital needs due to equity de-risking initiatives.

2018 Banking & Asset Management Operating Free Cash Flow increased by Euro +30 million to Euro 628 million, mainly driven by:

- **Banking** (Euro +29 million), mainly attributable to Belgium.
- **Asset Management** was stable, mainly due to positive earnings contribution from AXA IM and AB which more than offset the effect of the reduced ownership of AB following the Initial Public Offering and subsequent sell-down of AXA Equitable Holdings.

LINKING GROUP OPERATING FREE CASH FLOWS TO OPERATING RETURN ON GROUP EOF

The following table presents the link between the Group Operating Free Cash Flows and the Operating return on Group EOF.

OPERATING FCF AND OPERATING RETURN ON EOF *Euro billion*	**2018 Operating FCF**	**2018 Operating return on EOF**
In force future profits[1]	0.6	-
Release of prudential buffers and risk premiums and unwind of discount effect	3.3	3.3
New business strain	(1.2)	(1.2)
Value of new premium future profits included in EOF		2.9
Operating variance and change in assumptions		(0.1)
Total Life & Savings	**2.7**	**4.9**
Earnings contribution	3.5	4.4
Change in required capital	0.3	-
Total Property & Casualty, Asset Management and Banking	**3.7**	**4.4**
Holding costs		(1.0)
Total	**6.6**	**8.3**

[1] Already included in Solvency II EOF.

APPENDICES

A. METHODOLOGY

A.1 COVERED BUSINESS AND VALUATION DATE

The IFRS scope of consolidation is the reference scope for the consolidation of the Solvency II balance sheet of which the Eligible Own Funds (EOF) is a component.

The **Group EOF** is the sum of the EOF of the Life & Savings, Property & Casualty, Banking & Asset Management and Holdings segments.

AXA's Life & Savings segment covers a broad range of life insurance products, including retirement and health products, for both companies and individuals. This segment accounted for 58% or Euro 59 billion of AXA's consolidated IFRS gross revenues for the year ended December 31, 2018. The following entities are in the scope of this segment:

- United States;
- France;
- Europe: Germany, Belgium, Switzerland, Italy, Spain;
- International & new markets: Mexico, Turkey, Colombia, Nigeria, Morocco, Luxembourg, Greece, Poland, Czech Republic, Slovakia, Singapore, India;
- Asia: Japan, Hong Kong, Thailand, Indonesia, Philippines, China; and
- Others markets: AXA Life Invest.

AXA's Property & Casualty segment covers a broad range of products, including mainly motor, household, property and general liability insurance for both personal and commercial customers. This segment accounted for 38% or Euro 39 billion of AXA's consolidated IFRS gross revenues for the year ended December 31, 2018. The following entities are in the scope of this segment:

- France;
- Europe: UK including Ireland, Germany, Belgium, Switzerland, Italy, Spain;
- Asia: Hong Kong, Thailand, Indonesia, China, Direct Japan, Direct Korea;
- International and new markets: Mexico, Turkey, Colombia, Nigeria, Morocco, Luxembourg, Greece, Poland, Brazil, Lebanon, Gulf Region, Russia, Singapore, Malaysia, India;
- AXA XL: XL, AXA Corporate Solutions, AXA Art; and
- Others P&C: AXA Assistance, AXA Liabilities Manager and AXA Global Re.

AXA's Banking & Asset Management segment notably includes AXA Bank Europe, AXA Investment Managers and Alliance Bernstein.

AXA's Holdings segment includes AXA SA and other holdings.

2018 EOF were determined using data and assumptions as of December 31, 2018 for all covered businesses with foreign exchange rates consistent with IFRS accounts.

A.2 ECONOMIC RESOURCES – EOF

Eligible Own Funds (EOF) represent the amount of economic capital available to absorb losses under stress events. The EOF are the surplus of assets over liabilities derived from the Solvency II balance sheet.

EOF are split into three different buckets of capital (so-called "tiers") determined according to the quality of such components as defined by Solvency II regulation. Tier 1 includes the capital net of foreseeable dividend mainly made of ordinary shares, a reconciliation reserve and eligible undated subordinated debt. Tier 2 includes dated subordinated debt and the potential reclassification of undated subordinated debt into Tier 2, if exceeding 20% of total Tier 1. Tier 3 mainly includes net deferred tax assets.

As per Solvency II regulation, the following limits apply: (a) the eligible amount of Tier 1 items shall be at least one half of the Solvency Capital Requirement; (b) the eligible amount of Tier 3 items shall be less than 15 % of the Solvency Capital Requirement; (c) the sum of the eligible amounts of Tier 2 and Tier 3 items shall not exceed 50 % of the Solvency Capital Requirement. In addition, Tier 1 subordinated debt shall not exceed 20% of total Tier 1.

A.3 ASSETS

Assets in the Solvency II market consistent balance sheet correspond to financial and non-financial, deferred tax assets and reinsurance recoverable.

Invested assets: as a general principle, are marked-to-market in the Solvency II balance sheet. As most invested assets, such as listed equities and bonds, are classified as "available for sale assets" under IFRS, they are already measured at fair value in the IFRS balance sheet. Therefore, there is no need to adjust their IFRS fair value for the Solvency II balance sheet. Real estate assets, on the other hand, are recorded at cost in the IFRS balance sheet, so they need to be restated to market value under Solvency II. Likewise, for all other invested asset categories not recorded at fair value under IFRS, an adjustment to re-measure them at fair value is performed.

Intangible assets, such as goodwill, customer values, value of business in-force and deferred acquisition costs are eliminated in the Solvency II balance sheet. However, other intangible assets, that are separable and for which there are evidence of exchange transactions for the same or similar assets, indicating they are saleable in the market place, are recognized at fair value. In practice, this corresponds to software.

Reinsurance assets, recoverable from reinsurance contracts and special purpose vehicles are also adjusted from their IFRS value to take into account expected losses due to default of the counterparty.

Deferred tax assets and liabilities (DTA and DTL): all Solvency II adjustments from IFRS are reflected with the corresponding impacts on DTA and DTL. The recoverability of the potential net DTA is tested at Group level using Solvency II principles.

A.4 LIABILITIES

Best Estimate Liabilities correspond to the probability-weighted average of future policyholder's claims and benefits, expenses, taxes, taking into account the time value of money by discounting these future cash flows at their present value. The calculation of best estimates is based upon up-to-date credible information and realistic assumptions. The cash-flow projections used in the calculation of best estimates take into account all the cash in- and out-flows required to settle the insurance and reinsurance obligations over their lifetime.

This valuation requires deep analysis of the underlying obligations, collection of qualitative and quantitative information, projection tools and models, and expert judgment in a number of areas. The best estimate liability is recognized on a gross of reinsurance basis, without deduction of any amounts recoverable from reinsurance contracts and special purpose vehicles. The latter are recognized separately.

Contract boundaries limitations are taken into account as per Solvency II regulation (see section B.2).

The best estimate liabilities include an allowance for time value of Options and Guarantees (O&G).

This time value of O&G covers all material O&G embedded in AXA's Life and Savings operations. The key O&G considered are interest rate guarantees on traditional products, profit sharing rules, guaranteed benefits on Unit-Linked annuity products and dynamic policyholder behavior, that is, the options that policyholders can elect in a manner that are unfavorable to the company. They are calculated following a risk neutral approach (see section A.5).

Risk Margin (RM) is added to the best estimate policyholder's liabilities to reach values consistent with the manner in which market prices are fixed when there are no deep and liquid markets. The RM is defined as the cost of non-hedgeable risk, i.e. a margin in addition to the expected present value of liability cash flows required to manage the business on an ongoing basis. It is deemed to be the present value of the cost of future economic capital requirements (derived from the internal model) for non-hedgeable risks. As per Solvency II regulation, RM is calculated with a cost of capital rate of 6.

Subordinated debt issued by the Group is treated as capital under Solvency II regulation and therefore part of EOF, subject to tiering limits.

Senior debt is re-measured at fair value excluding AXA's own credit risk movements and treated as liabilities.

Foreseeable dividends are deducted from the EOF, as required by the Solvency II regulation.

A.5 RISK NEUTRAL VALUE

The risk neutral value is assessed using specific stochastic models (entirely designed for the purpose of valuation under a risk neutral framework). They are based on a set of economic and financial conditions, which are run over at least 1,000 economic risk neutral scenarios based on the assumptions described below. The value allows for the behavior of clients (e.g. lapses) and for some management actions (e.g. dynamic investment strategy, changing credited rate).

The economic scenarios are constructed using a proprietary economic scenario generator developed by Barrie & Hibbert. A number of asset classes and economic assumptions are modelled stochastically. This includes equities, bond yields, credit spreads, credit defaults, property, foreign exchange and inflation. The interest rates diffusion model is the Libor Market Model (LMM+), which allows for negative interest rates scenarios. The interest rate and equity volatility model used is the Stochastic Volatility Jump Diffusion Model. The construction of market consistent risk neutral economic scenarios requires a careful calibration of underlying market parameters to ensure that the valuation replicates the market prices of assets. Three key areas of calibration are the initial yield curves, the implied market consistent volatility, and the correlations between asset classes and geographies. The model calibration is described further under section B.1. The interest rate model considers both parallel shifts and twists to the yield curve.

A.6 TREATMENT OF INSURANCE SUBSIDIARIES IN THE US

As permitted per the Solvency II regulation, AXA US operations are considered under the provision of the equivalence regime. Thus, their contribution to Group EOF corresponds to the local available capital used for the calculation of the risk-based capital (RBC) ratio. The components of the available capital are (i) the statutory capital and surplus, (ii) the asset valuation reserve, which cushions surplus against market losses from the asset portfolio (iii) and 50% of the provision for policyholder dividends to be paid in the following year.

A.7 TREATMENT OF XL SUBSIDIARIES

The contribution to the AXA Group Solvency II ratio from the entities that were part of the XL Group (“XL entities”) as at December 31, 2018 was calculated in accordance with the equivalence regime, based on the Bermudian Standard Formula SCR, plus a 5% add-on required by the AXA’s lead supervisor (ACPR), as a transitional measure.

In compliance with the decision from ACPR, XL entities will be fully consolidated for Solvency II purposes (as per the consolidation-based method set forth in the Solvency II Directive) and their contribution to the Group’s Solvency capital requirement will be calculated using the Solvency II standard formula from March 31, 2019. Subject to prior approval of the ACPR, the Group intends as soon as FY 2020 to extend its Internal Model to XL entities.

A.8 SECTORAL RULES

The so-called “sectoral rules” are part of Solvency II regulation and relate to non-insurance financial services. Under sectoral rules, the contribution of those operations corresponds to their available capital as per applicable sector rule.

A.9 NEW BUSINESS

The **value of new business** ("NBV") sold during the calendar year is determined based on the EEV CFO Forum Principles.

The new business value includes both the initial cost (i.e. "strain") of selling new business and the future earnings and return of capital to the shareholder.

New business includes new contracts written in the current year. If future flexible premia and expected renewal flows from those contracts are reasonably predictable, for example they are included in pricing the contract and/or there is stable historical experience, then they and the benefits associated with them are included in the projection of future cash flows. If policy additions are the result of significant new marketing activity and were not anticipated at the time of original contract sale, then such additions are reflected as new business. This treatment of future flexible premiums and renewals is required by the EEV Principles and Guidance, but some areas of judgment remain. Due to different practices across the market, AXA looks to better align its treatment in each country with that of its peer companies.

As allowed by the EEV CFO Forum Principles (Principle 8), the Solvency II limitations relating to the boundaries of an insurance contract are not considered for the calculation of the value of new business.

The NBV includes an allowance for the Time Value of Options and Guarantees, calculated following a risk neutral approach (see section A.5 Risk Neutral Value).

The NBV also reflects a Cost of Capital and Non-Financial Risks (CoC/NFR). CoC and NFR can be considered as provisions to reflect respectively a cost of locked-in minimum required hard capital and for other non-financial risks the excess target local capital over the minimum requirement. The cost of capital is the economic cost incurred through the payment of investment expenses and taxes on investment income earned from assets held in excess of the policyholder reserves. Mechanically, this can be viewed as the difference between investment earnings which are the reference rate after-tax and after investment expenses, compared to a discount rate which is the reference rate before tax and expenses. The amount of such assets is equal to the required capital and is considered to be locked-in. The provision for non-financial risks is calculated in a similar manner, but the cost is applied to the excess between the target local hard capital and the minimum local hard capital.

Full consistency of scope is ensured between the computation of NBV and new business volume indicators (APE or PVEP).

A.10 SENSITIVITIES

Sensitivities are applied one at a time, rather than in combination. Combined effects are likely to be different than implied by adding the effects from separate sensitivities.

For purposes of the NBV sensitivity, shocks to financial market conditions, such as change in reference interest rates or equity market levels, are assumed to occur after the point of sale, rather than just before the point of sale. Therefore, the NBV sensitivity gives an indication of how the future profits of the new business written during the year would have been affected by an economic shock occurring after the year-end. It also indicates what the NBV might have been if sales occurred at the same volume, mix and pricing as those in 2018 but in a new market environment.

For US life and savings business, EOF sensitivities apply to US contribution to Group EOF under the provision of the equivalence regime.

Upward shift of 50 basis points in reference rates simulates a sudden shock to the initial conditions. This means changes to: 1) the current market values of fixed-interest assets, with related possible changes to projected capital gains/losses and/or fee revenues, 2) future reinvestment rates for all asset classes, and 3) risk-discount rates. The change is applied to the reference interest rates including the liquidity premium, where applied in the base case. Inflation rates, the volatility on interest rates and the Ultimate Forward Rates are not changed.

Downward shift of 50 basis points in reference rates is the same as above but with a shift downward.

25% higher value of equity markets: simulates a shock to the initial conditions for equities only. Listed equities and private equity values including the impact of equity hedges are shocked. This means changes to current market values of all these equities excluding hedge funds, with related possible changes to projected capital gains/losses and/or fee revenues.

25% lower value of equity markets: same methodology as mentioned above assuming a decrease.

10% higher value of real estate simulates a shock to the initial conditions for real estate only. This means changes to current market values of real estate, with related possible changes to projected capital gains/losses and/or fee revenues.

10% lower value of real estate: same methodology as mentioned above assuming a decrease.

Upward parallel shift of 25% of the volatility on equity markets simulates a shock to the initial conditions, representing the base volatility times 1.25 for the key duration and then applying a parallel shift for the other durations.

Upward parallel shift of 25% of the volatility on interest rates simulates a shock to the initial conditions, representing the base volatility times 1.25 for the key duration and a parallel shift for other durations.

50 basis point instantaneous increase in credit spreads is immediately applied at the valuation date and is applicable to all corporate credit asset classes and associated derivatives. This should be calibrated as a sudden shock of plus 50bps on the single A credit spread. This means changes to the current market value of credit assets, with related possible changes to projected capital gains/losses and/or fee revenues. The volatility adjustment is considered constant.

50 basis point instantaneous decrease in credit spreads: same methodology as mentioned above assuming a decrease.

Overall 10% decrease in the lapse rates means that base lapse rates are multiplied by 0.9. Decreased lapses can have a positive or negative effect depending on policy design and at which duration the lapse occurs.

Overall and permanent decrease of 10% in expenses applies to all future expenses other than commission and commission-related (for example, agency manager payments that are a percentage of agent commissions) expenses and investment expenses (as they are managed separately from Life companies' general expenses).

5% lower mortality rate for annuity business reflects the impact on annuity business profits from assuming a 5% lower mortality rate.

5% lower mortality rate for life business reflects the impact on life insurance business profits from assuming a 5% lower mortality rate.

Reference rate without volatility adjustment reflects what would be the value if no volatility adjustment had been considered in the reference interest rates for the definition of the reference interest rate.

Decrease of the UFR by 15bps reflects what would be the value if ultimate forward rate had to decrease by -15bps.

A.11 FREE CASH FLOWS

Group Free Cash Flows are the sum of L&S, P&C and Banking & Asset Management Free Cash Flows.

L&S Free Cash Flow: a measure of dividend paying capacity calculated as the sum of expected statutory earnings and expected required capital changes.

P&C Free Cash Flow: a measure of dividend-paying capacity calculated as the sum of IFRS Underlying Earnings including realized capital gains and realized required capital changes.

B&AM Free Cash Flow: a measure of dividend-paying capacity, equal to IFRS Underlying Earnings.

Required capital is the amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted due to local regulatory requirement. Depending on jurisdictions, capital available to cover required capital might include soft capital. As an example, the present value of future profits net of risk margin can be recognized as part of available capital under Solvency II. For insurance units operating in the EEA, the required capital is at least sufficient to obtain a 130% solo solvency ratio. For insurance units operating outside EEA, the minimum target solvency ratio is at least 130% for Switzerland, and at least 150% for other entities with limitations on soft capital to half of the target solvency capital.

A.12 GROUP EMBEDDED VALUE

Group Embedded Value is the Life and Savings European Embedded Value plus IFRS Tangible Net Asset Value for other segments. It is derived from the EOF with the following adjustments: (i) inclusion of dividend to be paid, (ii) removal of subordinated debts, (iii) removal of RM and inclusion of a cost of capital and non-financial risks, (iv) removal of boundaries of contract limitations, (v) group share impact and (vi) US equivalence impact.

B. ASSUMPTIONS

B.1 FINANCIAL ASSUMPTIONS

Investments market conditions

The projection of cash flows considers economic scenarios designed to reflect market conditions. Any such model necessarily has a limited number of inputs and will not perfectly reproduce all of the current conditions. The target conditions for the modeling are described below. The fit of the model to these defined targets is tested by assuring that Euro 1 of initial asset value is reproduced when projected and discounted and by tests that confirm the model stays close to the targets (the models and the present values they produce are therefore called ‘market consistent’). The process of refining the model so that it reproduces market conditions is referred to as ‘calibration’.

For EOF and NBV calculations, AXA generates market-consistent economic scenarios based on reference interest yield curves. AXA has fully aligned the determination of the reference yield curves with Solvency II methodology.

The details of the methodology to determine the reference yield curve under Solvency II are available in the Solvency II Delegated Acts. When complying with this methodology, AXA performs the following adjustments over the interest rate swap curves:

- Application of credit risk adjustments -CRA- (deducted from the curves) and volatility adjustments -VA- (added to the curves) until the last liquid point. The application of the volatility adjustment is conditional on the type of business. In practice, for General Account business, 100% of volatility adjustment is applied while 0% is used for Unit-Linked business;
- Interpolation based on Smith-Wilson technique from the forward rate at the last liquid point to ultimate forward rate (UFR), with predefined numbers of years of convergence.

For AXA’s main currencies, the main parameters necessary for the construction of the reference yield curves are available for 2018 and 2017 are summarized in the table below:

REFERENCE YIELD CURVE PARAMETERS	Period	EUR	USD	GBP	JPY	CHF	HKD
Volatility adjustment *basis points*	2018	24	56	27	3	4	56
	2017	4	27	18	2	-3	27
Credit risk adjustment *basis points*	2018	10	17	10	10	10	35
	2017	10	10	10	10	10	10
Ultimate forward rate *percentage*	2018	4.05	4.05	4.05	3.35	3.05	4.05
	2017	4.20	4.20	4.20	3.20	3.20	4.20
Last liquid point *years*	2018	20	50	50	30	25	15
	2017	20	50	50	30	25	15
Convergence period to UFR *years*	2018	40	40	40	40	40	45
	2017	40	40	40	40	40	45

The last liquid point is set by Solvency II regulation on the basis of an assessment of the liquidity of the corresponding swap market. The convergence period is used in the interpolation method referred to above.

The following tables show the reference yield curves as of December 31, 2018 and December 31, 2017. The first table corresponds to application of 0% of volatility adjustment, used for Unit-Linked business and the second to 100% of volatility adjustment for General Account business.

0% VA*	EUR		USD		GBP		JPY		CHF		HKD	
Maturity	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
1	-0.3%	-0.4%	2.6%	1.8%	1.0%	0.6%	-0.1%	-0.1%	-0.7%	-0.7%	1.8%	1.5%
2	-0.3%	-0.3%	2.5%	2.0%	1.1%	0.7%	-0.1%	-0.1%	-0.7%	-0.6%	1.9%	1.7%
3	-0.2%	-0.1%	2.4%	2.1%	1.1%	0.8%	-0.1%	0.0%	-0.6%	-0.5%	1.9%	1.9%
5	0.1%	0.2%	2.4%	2.2%	1.2%	0.9%	-0.1%	0.0%	-0.4%	-0.2%	2.0%	2.0%
7	0.4%	0.5%	2.5%	2.2%	1.3%	1.1%	0.0%	0.1%	-0.1%	-0.1%	2.0%	2.1%
10	0.7%	0.8%	2.6%	2.3%	1.3%	1.2%	0.1%	0.2%	0.2%	0.2%	2.1%	2.2%
15	1.1%	1.2%	2.7%	2.4%	1.4%	1.3%	0.3%	0.4%	0.5%	0.4%	2.2%	2.4%
20	1.3%	1.4%	2.7%	2.5%	1.5%	1.4%	0.5%	0.6%	0.7%	0.6%	2.3%	2.7%
25	1.6%	1.6%	2.7%	2.5%	1.5%	1.4%	0.6%	0.7%	0.7%	0.6%	2.5%	2.9%
30	1.9%	2.0%	2.7%	2.5%	1.5%	1.3%	0.6%	0.8%	0.9%	0.8%	2.7%	3.1%

100% VA*	EUR		USD		GBP		JPY		CHF		HKD	
Maturity	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
1	-0.1%	-0.3%	3.2%	2.1%	1.3%	0.7%	-0.1%	-0.1%	-0.7%	-0.8%	2.4%	1.7%
2	0.0%	-0.2%	3.1%	2.3%	1.3%	0.9%	-0.1%	0.0%	-0.6%	-0.6%	2.4%	2.0%
3	0.1%	0.0%	3.0%	2.4%	1.4%	1.0%	-0.1%	0.0%	-0.5%	-0.5%	2.5%	2.1%
5	0.3%	0.2%	3.0%	2.4%	1.5%	1.1%	0.0%	0.0%	-0.3%	-0.3%	2.5%	2.3%
7	0.6%	0.5%	3.0%	2.5%	1.5%	1.2%	0.0%	0.1%	0.0%	-0.1%	2.6%	2.4%
10	1.0%	0.8%	3.1%	2.6%	1.6%	1.4%	0.1%	0.2%	0.3%	0.2%	2.7%	2.5%
15	1.3%	1.2%	3.2%	2.7%	1.7%	1.5%	0.3%	0.4%	0.6%	0.4%	2.7%	2.7%
20	1.5%	1.4%	3.3%	2.7%	1.7%	1.6%	0.5%	0.6%	0.7%	0.5%	2.8%	2.9%
25	1.8%	1.7%	3.3%	2.8%	1.7%	1.5%	0.6%	0.7%	0.8%	0.6%	2.9%	3.1%
30	2.1%	2.0%	3.3%	2.7%	1.7%	1.5%	0.7%	0.8%	0.9%	0.8%	3.1%	3.2%

**Volatility adjuster*

The approach to setting **market consistent volatility** targets in a risk neutral calculation focuses on the implied volatility of market prices for different asset classes. These implied volatilities can be derived from pricing formulas and the observed market prices of various derivative instruments. The diffusion models allow for the modeling of interest rates and equity volatility surfaces with a significant granularity. The tables below show the targets used for 10 years swaptions and at-the-money equity options at year 5 and 10 for each of the major areas.

The table below shows the target volatilities for interest rate and equity in 2017 and 2018.

TARGET INTEREST RATE VOLATILITIES (10y swaptions)	2018		2017	
	year 5	year 10	year 5	year 10
EUR	0.60%	0.62%	0.62%	0.65%
USD	0.74%	0.68%	0.68%	0.66%
GBP	0.69%	0.67%	0.70%	0.69%
JPY	0.26%	0.32%	0.27%	0.32%
CHF	0.66%	0.66%	0.72%	0.73%
HKD	0.79%	0.85%	0.81%	0.94%

TARGET EQUITY VOLATILITIES	2018		2017	
	year 5	year 10	year 5	year 10
EUR	16%	17%	18%	20%
USD	20%	24%	18%	23%
GBP	15%	18%	16%	19%
JPY	19%	18%	19%	19%
CHF	15%	15%	14%	14%
HKD	22%	22%	20%	20%

Correlations measure the extent to which various asset classes and geographies move together over time. The correlation of equity returns, inflation, bond yields, and geographies, has been set with reference to historical market data. It is not possible to estimate an "implied correlation", as there are almost no financial instruments available with sufficient liquidity from whose price one can, in an objective manner, derive market consistent implied correlations. AXA's modeling ensures that correlations between equities and 10-year bond interest rates are between 10% and 25%.

Inflation rates targets in a risk neutral calculation are based on market implied inflation. For geographies where data is not available a management's expectations of inflation in future period is considered. Inflation is mainly impacting the EOF and NBV through expenses, premiums and some benefits indexations. The table below shows the average implied inflation rates for areas where the information is available.

INFLATION RATE	2018	2017
EUR	0.8%	1.4%
USD	0.8%	2.0%
GBP	2.9%	3.3%

Asset mix assumptions

The assumptions described above are used in local models in conjunction with the asset mix, to derive the assumed projected fund volatility, a key driver of the risk neutral values.

Asset mixes used for Life & Savings are shown in the table below at the country level, although calculations are usually done using the applicable asset mix per line of business. The asset mixes describe the intended investment strategy of each operating company rather than the position at the start of the projection. They show the proportion of asset classes including fixed-income, equity and other assets in the portfolio. The sum of these proportions is hence 100, barring the rounding errors.

ASSET MIX *Percentage of fixed-income/equity/others at ultimate*	**2018**	**2017**
United States	94/0/6	94/0/6
France	0/0/0	83/8/8
Switzerland	83/4/13	87/2/11
Japan	91/9/0	91/9/0
Belgium	78/4/18	76/5/19
Hong Kong	73/22/5	74/21/5
Germany	90/6/4	93/4/3

Exchange Rates

End of year EOF and EEV are calculated using end of year exchange rates.

EXCHANGE RATES *vs. Euro*	**2018**		**2017**	
	Year-end	**Average**	**Year-end**	**Average**
USD	1.143	1.181	1.201	1.130
GBP	0.898	0.885	0.888	0.877
CHF	1.127	1.155	1.170	1.112
JPY	125.4	130.4	135.3	126.7
HKD	8.950	9.255	9.387	8.805
CZK	25.74	25.65	25.53	26.33
HUN	320.8	318.8	310.2	309.2
POL	4.295	4.261	4.172	4.257
SGD	1.558	1.592	1.605	1.559
PHP	60.11	62.19	59.94	56.97
THB	36.97	38.15	39.14	38.30
IDR	16438	16796	16292	15118
CNY	7.849	7.806	7.820	7.629
INR	79.81	80.72	76.64	73.53
TRY	6.081	5.702	4.553	4.121

B.2 TECHNICAL ASSUMPTIONS

Actuarial assumptions

All cash flows (premiums, expenses, commissions, death and surrender claims, etc.) are included on a best estimate basis up until the termination of AXA's obligations towards policyholders and beneficiaries. AXA uses an active basis where the assumptions are adjusted to reflect historical experience. The assumptions are reviewed at least on an annual basis.

The historical trend of past mortality improvements for life insurance business has generally been assumed to continue for part of the future projection at a more conservative level than historical experience. However, annuity business in all markets generally reflects an expected continuation of past mortality improvement trends into the future; this combination of partially reflecting improvement trends for life insurance business while fully reflecting it for annuities is on balance prudent.

Tax assumptions

The following table shows the nominal tax rates applied.

TAX RATES	2018	2017
United States	21%	35%
France	34%	34%
Switzerland	20%	21%
Japan	28%	28%
Belgium	30%	34%
Hong Kong	17%	17%
Germany	32%	32%

In most jurisdictions, different tax rates apply to different types of income and expense, so effective tax rates will vary. Generally, stochastic projections also reflect the impact of economic scenarios on the sources of taxable income and the related taxes.

In 2017, a tax reform has been voted in the United States leading to a decrease in corporate tax rate from 35% to 21% in 2018. It has been reflected in the EOF, EEV and NBV as at 31 December 2018.

In 2017, a tax reform has been voted in France leading to a decrease in corporate tax rate from 34.43% to 25.82% in 2022. It has been reflected in the EOF, EEV and NBV as at 31 December 2018.

In 2017, a tax reform has been voted in Belgium leading to a decrease in corporate tax rate from 33.99% to 25.00% in 2020. It has been reflected in the EOF, EEV and NBV as at 31 December 2018.

Expenses

Expenses include administrative, investment management, claims management and acquisition expenses which relate to recognized insurance and reinsurance obligations. Such expenses are based on the actual analysis of expenses performed by each company. The assumptions underlying the expense projections should be consistent with the strategy of the company, considering future new business and any change in the expenses validated by local management. An allowance is made in the projections for inflation on future expenses. Inflation assumptions are selected on the basis of the local economic environment and the specifics of each company, and generally vary across economic scenarios.

Boundary of an insurance or reinsurance contract

The boundaries of contract principles set by the Solvency II regulation define which future premiums expected from in-force contracts already underwritten may be included in the projection (Solvency II Delegated Acts published in the Official Journal of the European Commission on January 17, 2015). If the company has either a right to reject future premiums on a unilateral basis or to re-price these premiums to reflect the full risks covered, they should be excluded from the Solvency II balance sheet. The best estimate liabilities, as reflected in EOF, are consistent with this Solvency II requirement on contract boundaries limitation. Nonetheless, as allowed by the EEV CFO Forum Principles (Principle 8), limitations regarding the boundaries of an insurance contract are not considered for the calculation of the NBV.

Modeling of participating and adjustable credited rates business

Participating business is generally characterized by the following key features:

- a minimum interest rate or level of bonus is guaranteed on the contract. At least the guaranteed rate or bonus is credited under all circumstances. Hence, whenever fund returns do not achieve the minimum performance, the shareholders bear the cost of maintaining the guaranteed level;
- generally, bonuses and crediting rates will exceed minimum guaranteed levels. The amount credited is based on profit sharing rules as well as the performance of the investment markets and involves a degree of management discretion;
- given the above, it is essential that the value reflects how bonuses and crediting rates are determined, when future expected performance varies.

This will impact the value in the following manner:

- the guaranteed interest rate and any further policyholder participation in profits which is not linked to the actual investment results above the reference interest rate impacts net present value of future profits;
- the profit-sharing rule impacts the time value of O&G depending on the market performance. In cases where the market performs well, the policyholder participates in the investment profits while in case of negative market performance the shareholder bears a higher portion if not all of the loss. The level of the time value of O&G reflects the likelihood of these additional payments being made, net of the amount reflected as intrinsic value in the net present value of future profits.

The participating features of products are usually a combination of contractual / legal requirements, and management discretion based on competition or market practice (where management chooses the level of credited rate, over and above the guaranteed rate).

In all operations where this is relevant, the participating business has been modelled to reflect contractual and regulatory constraints, in addition to how AXA manages the business.

The limited residual funds at the end of the projection are apportioned between shareholders and policyholders according to applicable profit-sharing rules.

Management actions

Management actions refer to operational measures available to company's management in order to strengthen business. Dynamic management actions include, but are not limited to strategic asset allocation, crediting rates in participating business, products pricing and expense management. As stated in the Delegated Acts published in the Official Journal of the European Commission on January 17, 2015, assumed future management actions are to be consistent with the insurance or reinsurance undertaking's current business practice and business strategy. Management actions shall recognize the time and cost of implementing them and must be documented. Management actions are applied to both in EOF and NBV.

B.3 REAL WORLD ECONOMIC ASSUMPTIONS

The pre-tax management's expectations for future economic conditions in 2017 and 2018 are shown in the following table. Those assumptions are used to derive the internal rates of return.

REAL WORLD ASSUMPTIONS			EUR	USD	JPY	CHF	HKD
30Y GOVERNMENT RATE *Percentage*	First year	2018	1.1	3.3	0.8	0.6	2.6
		2017	1.8	3.0	0.9	0.8	2.6
	Ultimate	2018	2.5	3.8	1.9	2.6	3.8
		2017	2.5	3.8	1.9	2.6	3.8
EQUITY RETURN *Percentage, including dividends*	First year	2018	4.0	4.0	2.8	2.2	3.0
		2017	8.0	6.0	3.5	4.7	7.1
	Ultimate	2018	5.8	6.0	4.7	4.7	7.1
		2017	5.8	6.0	4.7	4.7	7.1
REAL ESTATE *Percentage*	First year	2018	5.0	5.0	3.5	3.8	7.2
		2017	5.8	4.1	3.7	3.9	6.0
	Ultimate	2018	5.1	5.7	3.6	4.3	6.0
		2017	5.1	5.7	3.6	4.3	6.0
INFLATION RATE *Percentage*	First year	2018	1.5	2.1	0.7	0.7	2.2
		2017	1.4	2.2	0.6	0.6	2.5
	Ultimate	2018	2.0	2.5	1.5	1.0	3.0
		2017	2.0	2.5	1.5	1.0	3.0

C. GLOSSARY

APE (Annual Premium Equivalent): a measure of new business volume which is equal to 100% of regular premia plus 10% of single premia on newly issued contracts.

BEL (Best Estimates Liabilities): Market value of obligations of an insurance company to the policyholders and beneficiaries.

BoC (Boundary of Contract): the boundaries of contracts principles set by the Solvency II rules define which future premiums expected from in-force contracts already underwritten may be included in the projection.

Certainty Equivalent PVFP (CE PVFP): the present value of future statutory after-tax profits, projected over the remaining duration of liabilities in a scenario (certainty equivalent scenario) where all instruments are assumed to earn the reference rate.

CoC/NFR (Cost of Capital/Non-Financial Risks): the cost of holding capital in excess of the policyholder reserves. Please refer to required capital definition.

Comparable basis: a change on a comparable basis is calculated at constant FX, scope and accounting period.

CRA (Credit Risk Adjustment): an adjustment to the swap curve in the reference yield curve's determination. It aims at capturing the credit risk embedded in the floating rate leg of the swap deal. It's calculated as 50% of the average over 1 year of the difference between the floating rate of interest rate swaps and overnight indexed swap rates. It's floored by 10bps and capped at 35bps.

Economic variance: reflects the experience variance observed over current year compared to the management case scenario on expected financial conditions for the current year at the end of the previous year, and the change in EOF created by reflecting end of current year market conditions in the BEL rather than those of end of last year.

EOF (Eligible Own Funds): surplus derived from the Solvency II balance sheet. It is defined as the excess of market value of assets over market value of liabilities as of valuation date.

EV (Embedded Value): is a measure of the consolidated value of shareholders' interests in the covered business.

Expected existing business contribution: reflects the release of TVOG, RM release from in-force, plus the unwind of the EOF at the reference rate plus the financial over-performance expected under management case assumptions defined at the end of the previous year.

FCF (Free Cash Flows): a measure of dividend capacity calculated as the sum of earnings and required capital change.

Group Solvency II ratio: Group's Eligible Own Funds (EOF) divided by Group's Solvency Capital Requirement (SCR).

IRR (Internal Rate of Return): is a measure of the rate of return on any investment. IRR is the discount rate at which the present value of distributable earnings over the full lifetime of the business is equal to the capital invested to support the business underwritten.

Management case scenario: a deterministic economic scenario which reflects the management's expectations for future market conditions. Unlike risk-neutral scenarios where all assets earn in average the reference interest rate, assets in the management case scenario earn additional risk premiums.

NBV (New Business Value): the value of newly issued contracts during the current year. It consists of the present value of future profits after the costs of acquiring business, less (i) an allowance for the time value of financial option and guarantees, (ii) cost of capital and non-financial risks. AXA calculates this value net of tax.

NBV margin: NBV divided by APE.

NBV/PVEP Margin: NBV divided by PVEP.

Operating variance and change in assumptions: operating variance reflects the variation of year-end EOF versus the expected EOF due to the difference over the current year between realized and expected operational assumptions, such as mortality, longevity, lapses and expenses. Change in assumptions corresponds to the impact of changes in future assumptions relating to similar operational items.

PVEP (Present value of expected premiums): a measure of new business volume, equal to the present value at time of issue of the total premiums expected to be received over the policy term. The present value is discount at the reference interest rate. While the measure is not as closely linked to cash received in the current period as APE, the ratio of NBV/PVEP is a more economical indicator of profit margin than is the ratio of NBV/APE.

Reference interest rate: the risk-free rate proxy used as the basis for the market-consistent valuation.

Required capital: the amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted.

RM (Risk Margin): is the present value of the cost of future economic capital requirements for non-hedgeable risks. The RM is a part of the market-consistent value of liabilities.

SCR (Solvency Capital Requirement): is the capital required under local regulation. Under Solvency II it is calculated either with the standard formula (risk-based with factors applied on provisions and other key metrics or scenario-based with stress tests), or internal models (upon validation by supervisors).

Time value of O&G (Time Value of Options & Guarantees): the difference between the value of business determined across a range of scenarios and the value determined in a single scenario. The single scenario contains some intrinsic value of O&G that are "in the money" in that scenario and the stochastic projection allows the total value of the O&G to be determined. The difference represents the Time Value.

UFR (Ultimate Forward Rate): is a rate specified under Solvency II regulation which is defined by currency zone and is equal to the sum of a long-term inflation and an expected real rate of interest defined by the European Insurance and Occupational Pensions Authority (“EIOPA”).

VNP (value of new premium): the value of new premium for Life & Savings and Property & Casualty is defined as the value attached to the new premium under Solvency II requirements, including the application of contract boundaries and RM consumption. The value of new premium generates EOF.

VIF (value of in-force business): the discounted value of after-tax statutory profits projected over the future duration of existing liabilities. This notably incudes Time Value of O&G and CoC/NFR.

VA (Volatility Adjustment): an adjustment to the risk-free yield curve. The volatility adjustment is defined by currency zone and is based on 65% of the risk-corrected spread between the interest rate that could be earned from bonds, loans and securitizations included in a reference portfolio, and the basic risk-free interest rates.

D. CAUTIONARY STATEMENTS

This report includes terms used by AXA for the analysis of its business operations and therefore might not be comparable with terms used by other companies; these terms are defined in the glossary provided at the end of this report.

This report includes non-GAAP financial measures. Embedded value is not based on IFRS, which are used to prepare and report AXA's financial statements and should not be viewed as a substitute for IFRS financial measures. AXA believes the non-GAAP measure shown herein, together with the IFRS information, provides a meaningful measure for the investing public to evaluate AXA's business relative to the businesses of peers.

In the attached report, the Eligible Own Funds are reconciled to IFRS shareholders' equity as reported in AXA's 2018 financial statements. AXA's 2018 financial statements have been examined by the Board of Directors on February 20, 2019 and, as of the date of this report, are subject to completion of audit procedures by AXA's statutory auditors.

Auditors were asked to issue a report on the Economic Resources' information disclosed in the AXA Embedded Value & EOF report. The procedures performed by auditors encompass the disclosure of the results and of the underlying methodology and assumptions for the following information only:

- The Group EOF including the EOF of the different segments: Life and Savings and Other than Life and Savings,
- The Group EOF sensitivities,
- The Analysis of Change of change of Group EOF,
- The Life and Savings New Business Value (NBV),
- The reconciliation of the IFRS Shareholders' Equity to the Group EOF.

To the exclusion of the information listed above, any other information disclosed in the AXA Embedded Value & Solvency II Own Funds report was not in scope of auditors‘ procedures.

E. KEY PRINCIPLES

The Embedded Value is an estimate of the economic value of a life insurance business. It corresponds to the total net amount distributable to the shareholders, after sufficient allowance for the aggregated risks in the covered business, in a market consistent environment.

From the end of 2004, AXA's methodology for Life & Savings EV has been compliant with the European Insurance CFO Forum’s ('CFO Forum') European Embedded Value (EEV) Principles and guidance and has adopted a market-consistent approach.

In June 2008, the CFO Forum released the new MCEV Principles ©. AXA uses a market consistent methodology when making an allowance for the aggregate risks in its Life and Savings business but has remained under the EEV principles. While the CFO Forum remains committed to the value of supplementary information, including embedded value, the mandatory implementation date of MCEV principles was withdrawn, reflecting the on-going developments of insurance reporting under Solvency II and IFRS.

AXA’s methodology for Life and Savings EOF continues to comply with the 2016 revised CFO Forum’s EEV principles and guidance by aligning with Solvency II valuation principles where Solvency II is adopted for solvency reporting (CFO Forum EEV Guidance G1.5). The AXA methodology is a market consistent methodology. In particular:

- The methodology provides for the cost of all significant options and guarantees (O&G) for Life and Savings businesses.
- No allowance is made in the EOF for the cost of holding the required capital over and above the Solvency II risk margin (CFO Forum EEV principle 5), while and allowance is made in the NBV
- Their required capital is aligned with the Solvency II Solvency Capital Requirement (CFO Forum EEV Guidance 5.5)
- The level of renewals is aligned with the Solvency II boundaries of contracts for the value of new premium to the EOF while it is not for the New Business Value (CFO Forum EEV Guidance G8.3)
- Expenses allow for changes in future experience (CFO Forum EEV Guidance G9.4) as a result of expected management actions.
- The AXA methodology does not include the margins earned by affiliated investment management companies reported outside the Life and Savings segment, and with that respect is not compliant with the CFO Forum EEV Guidance 9.11.
- Alignment with Solvency II is made for taxes (CFO Forum EEV Guidance 9.13)
- The basic risk-free rate term structure, credit risk adjustment and volatility adjustment as calibrated and applied in Solvency II is applied (CFO Forum EEV Guidance 10.10).

F. PRICEWATERHOUSECOOPERS AND MAZARS ATTESTATION REPORT

To the AXA Group Chief Financial Officer

As statutory auditors of AXA Group and in accordance with your request, we have examined the Group Eligible Own Funds (EOF) including the EOF of the different segments (Life & Savings and Other than Life & Savings), the analysis of change in EOF, the EOF sensitivities, the reconciliation of the IFRS Shareholders' Equity to the EOF, the Life and Savings New Business Value (NBV) at December 31, 2018 of the AXA Group contained in the AXA Embedded Value and Solvency II Own Funds Report ("Embedded Value and Solvency II Own Funds Report") and hereinafter referred to as "Own Funds Information".

The Own Funds Information and underlying significant assumptions, upon which the information relies, have been established under the responsibility of management. The methods and significant assumptions adopted are detailed in the Embedded Value and Solvency II Own Funds Report.

We are responsible for expressing a conclusion on the compliance of the results of the Own Funds Information with the methodology and assumptions adopted by management and on the consistency of accounting information used with the AXA Group consolidated financial statements at December 31, 2018.

Our work, which does not constitute an audit, 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 procedures adopted by management to prepare the Own Funds Information,
- A review of the "market consistent" approach adopted by management, and described in the Embedded Value and Solvency II Own Funds Report for consistency with the Solvency II valuation principles and the European Insurance CFO Forum EEV Principles and Guidance,
- A review of the methodology used and implemented by management for consistency with that described in the Embedded Value and Solvency II Own Funds Report,
- A review of the methodology used and implemented by management for consistency with the European Insurance CFO Forum EEV Principles and Guidance as applied to NBV,
- A review of the assumptions used and implemented by management for consistency with those described in the Embedded Value and Solvency II Own Funds Report,
- A review of the internal consistency of the market consistent economic assumptions and of their consistency with observable market data,
- A review of the consistency of the technical assumptions with regard to past, current and expected future experience,
- A review of the testing performed by management on the underlying models used to calculate the Own Funds Information,

- Checking by review and reconciliation the consistency of the Own Funds Information with the methodology and assumptions in the Embedded Value and Solvency II Own Funds Report,

- Checking the consistency of the solvency capital data used in preparing the Own Funds Information with the risk capital information available as at December 31, 2018,

- Checking the consistency of the accounting information and other relevant underlying data used in preparing the Own Funds Information with the annual financial statements and underlying accounting records at December 31, 2018,

- Obtaining the information and explanations as deemed necessary to deliver our conclusion.

Due to the uncertain nature of estimation, actual outcomes can differ, perhaps significantly, from those used to determine the Own Funds Information. We express no conclusion relating to the possibility of such outcomes.

Based on our work, we have no observation, regarding:

- The compliance of the results of the Own Funds Information at December 31, 2018 presented in the Embedded Value and Solvency II Own Funds Report with the AXA Group's market consistent methodology and assumptions adopted by management and described in the Embedded Value and Solvency II Own Funds Report,
- The consistency of the AXA Group's market-consistent EOF methodology and assumptions with the Solvency II valuation principles and the European Insurance CFO Forum EEV Principles and Guidance,
- The consistency of the AXA Group's market-consistent NBV methodology and assumptions with the European Insurance CFO Forum EEV Principles and Guidance,
- The consistency of accounting information used with the AXA Group consolidated financial statements at December 31, 2018, on which we expect to issue our audit report on March 11, 2019.

Neuilly-sur-Seine and Courbevoie, February 21, 2019

PricewaterhouseCoopers Audit		**Mazars**	
Xavier Crépon	Grégory Saugner	Jean-Claude Pauly	Maxime Simoen