

OUTPERFORM TRANSFORM REBALANCE

ALTERNATIVE PERFORMANCE MEASURES

ALLIANZ GROUP

ALTERNATIVE PERFORMANCE MEASURES

The Allianz Group uses, throughout its financial publications, alternative performance measures (APMs) in addition to the figures which are prepared in accordance with the International Financial Reporting Standards (IFRS). We believe that these measures provide useful information to investors and enhance the understanding of our results. These financial measures are designed to measure performance, growth, profit generation and capital efficiency.

The APMs should be viewed as complementary to, rather than a substitute for, the figures determined according to IFRS.

The Allianz Group uses the following major alternative performance measures:

- Total revenues
- Internal growth
- Operating profit
- Return on equity
- Combined ratio
- New business margin
- Cost-income ratio
- Total assets under management

Investors should consider that similarly titled APMs reported by other companies may be calculated differently. For that reason, the comparability of APMs across companies might be limited.

In accordance with the guidelines of the European Securities and Markets Authority (ESMA), the following information is given in regards to the above mentioned alternative performance measures:

- Section 1:

Definition of the APM, its use and limitations on the usefulness.

- Section 2:

Reconciliation of the APM to the most directly reconcilable line item, subtotal or total presented in the financial statements.

The Allianz Group's most recent financial publications at any time are available online at www.allianz.com/results.

Definitions, use and limitations

TOTAL REVENUES

DEFINITION AND USEFULNESS

Total revenues are the "top line" figure from which costs and expenses are subtracted to determine operating profit and net income. According to our business segments, total revenues in the Allianz Group comprise gross premiums written in Property-Casualty, statutory premiums in Life/Health, operating revenues in Asset Management and total revenues in Corporate and Other (Banking).

$$\begin{aligned} \text{Total revenues}_{\text{Allianz Group}} &= \text{Gross premiums written}_{\text{Property-Casualty}} \\ &+ \text{Statutory premiums}_{\text{Life/Health}} \\ &+ \text{Operating revenues}_{\text{Asset Management}} \\ &+ \text{Total revenues}_{\text{Corporate and Other (Banking)}} \end{aligned}$$

We consider total revenues as a key performance indicator and believe that it is useful and meaningful to our external audience because it is an important financial measure for the performance and growth of the Allianz Group during a specific time period.

LIMITATIONS ON THE USEFULNESS

Total revenues do not provide any information as to the profitability of the Allianz Group. Therefore, total revenues should always be viewed in conjunction with other performance indicators such as operating profit or net income.

Furthermore, total revenues are subject to fluctuations which do not derive from the performance of the Allianz Group. These fluctuations result from effects of price changes, foreign currency translation as well as acquisitions, disposals and transfers. Accordingly, in addition to presenting nominal total revenue growth, we also present internal growth, which excludes some of these effects.

INTERNAL GROWTH

DEFINITION AND USEFULNESS

The Allianz Group presents the percentage change of total revenues adjusted for foreign currency translation and portfolio effects in addition to presenting the nominal total revenue growth. The adjusted percentage change is called internal growth.

The Allianz Group's Consolidated Financial Statements are presented in Euro. As a significant portion of our total revenues results from countries outside the Eurozone, the comparability between different periods is affected when exchange rates fluctuate. The comparability of our total revenues is further influenced by acquisitions, disposals as well as transfers (or "changes in scope of consolidation").

We believe that internal growth allows a meaningful analysis of revenue development as it makes data comparable from period to period and enhances the understanding of the underlying operating development.

Management uses internal growth in the steering of our business.

Internal growth of total revenues is determined by correcting nominal total revenue growth for the effects of foreign currency translation as well as acquisitions and disposals. Foreign currency translation effects are calculated as

$$\text{FX Effects} = \frac{\text{total revenues at CY FX rate} - \text{total revenues at PY FX rate}}{\text{PY total revenues at PY FX rate}}$$

CY = current year period

PY = prior year period

The effects of acquisitions are calculated as the percentage change in total revenues attributable to the acquired business while the effects of disposals are determined as the percentage change in total revenues assuming the disposed business had not been part of the Allianz Group in the previous period.

LIMITATIONS ON THE USEFULNESS

Internal growth rates are not adjusted for other effects, such as price changes.

OPERATING PROFIT (OP)

DEFINITION AND USEFULNESS

The Allianz Group uses operating profit to evaluate the performance of its reportable segments as well as of the Allianz Group as a whole. Operating profit highlights the portion of income before income taxes that is attributable to the ongoing core operations of the Allianz Group.

The Allianz Group considers the presentation of operating profit to be useful and meaningful to investors because it enhances the understanding of the Allianz Group's underlying operating performance and the comparability of its operating performance over time.

Operating profit is used as one of the decision metrics by Allianz Group's management.

To better understand the ongoing operations of the business, the Allianz Group generally excludes the following non-operating effects:

- income from financial assets and liabilities carried at fair value through income (net),
- realized gains and losses (net) and impairments of investments (net),
- interest expenses from external debt,
- acquisition-related expenses (from business combinations),
- amortization of intangible assets,
- restructuring charges,
- profit (loss) of substantial subsidiaries classified as held for sale.

The following exceptions apply to this general rule:

- In all reportable segments, income from financial assets and liabilities carried at fair value through income (net) is treated as operating profit if the income relates to operating business.
- For life/health insurance business and property-casualty insurance products with premium refunds, all items listed above are included in operating profit if the profit sources are shared with policyholders. There is one exception from this general rule with regard to policyholder participation in extraordinary tax benefits and expenses. As IFRS require that the consolidated income statements present all tax benefits in the income taxes line item, even when they belong to policyholders, the corresponding expenses for premium refunds are shown as non-operating as well.

Operating profit should be viewed as complementary to, and not as a substitute for, income before income taxes or net income as determined in accordance with IFRS.

LIMITATIONS ON THE USEFULNESS

Operating profit is subject to fluctuations which do not derive from the performance of the Allianz Group such as changes in foreign currency rates or acquisitions, disposals and transfers between reportable segments.

RETURN ON EQUITY (ROE)

DEFINITION AND USEFULNESS

For the Allianz Group, return on equity represents net income attributable to shareholders divided by the average shareholders' equity excluding unrealized gains/losses on bonds net of shadow accounting at the beginning of the period and at the end of the period.

$$\text{RoE}_{\text{AZ Group}} = \frac{\text{Net income attributable to shareholders}}{(\text{Shareholders' equity}^{1,2} \text{ begin of period} + \text{Shareholders' equity}^{1,2} \text{ end of period})/2}$$

1_Shareholders' equity excluding non-controlling interests

2_Shareholders' equity excluding unrealized gains/losses on bonds net of shadow accounting

The Allianz Group also uses RoE as a performance measure for the Life/Health segment. For the Life/Health segment, RoE represents net income divided by the average total equity excluding unrealized gains/losses on bonds net of shadow accounting at the beginning of the period and at the end of the period.

$$\text{RoE}_{\text{LH Segment}} = \frac{\text{Total net income}}{(\text{Total equity}^1 \text{ begin of period} + \text{Total equity}^1 \text{ end of period})/2}$$

1_Total equity excluding unrealized gains/losses on bonds net of shadow accounting

The Allianz Group uses RoE as a key performance indicator. It combines the view on business profitability and capital efficiency. Therefore, management uses RoE in the steering of our business.

LIMITATIONS ON THE USEFULNESS

The RoE of the Allianz Group or the Life/Health segment include items which are not indicative of the performance of management. Furthermore, RoE is not available at Line of Business or product level.

The performance indicator RoE is inherently limited by the fact that it represents a ratio and thus does not provide any information as to the absolute amount of net income or shareholders' equity/total equity excluding unrealized gains/losses on bonds net of shadow accounting.

COMBINED RATIO (CR)

DEFINITION AND USEFULNESS

The Allianz Group uses the combined ratio as a measure of underwriting profitability in the Property-Casualty segment. The combined ratio represents the total of acquisition and administrative expenses (net) and claims and insurance benefits incurred (net) divided by premiums earned (net).

$$CR_{PC\text{ Segment}} = \frac{\text{Acq. and admin. expenses (net)}^1 + \text{Claims and ins. benefits inc. (net)}^1}{\text{Premiums earned (net)}^1}$$

¹In insurance terminology, the term "net" means after reinsurance ceded.

The combined ratio is typically expressed as a percentage. A ratio of below 100% indicates that the underwriting result is profitable, whereas a ratio of above 100% indicates an underwriting loss.

The combined ratio can be further broken down into the loss ratio and the expense ratio. The loss ratio represents claims and insurance benefits incurred (net) divided by premiums earned (net), and thus expresses the percentage of net earned premiums used to settle claims.

$$\text{Loss ratio}_{PC\text{ Segment}} = \frac{\text{Claims and ins. benefits inc. (net)}}{\text{Premiums earned (net)}}$$

The expense ratio represents acquisition and administrative expenses (net) divided by premiums earned (net). It expresses the percentage of net earned premiums used to cover underwriting expenses for the acquisition of new or renewal business and for administrative expenses.

$$\text{Expense ratio}_{PC\text{ Segment}} = \frac{\text{Acq. and admin. expenses (net)}}{\text{Premiums earned (net)}}$$

LIMITATIONS ON THE USEFULNESS

The combined ratio is used to measure underwriting profitability, but it does not capture the profitability of the investment result or the non-operating result. Even in case of a combined ratio of above 100%, the operating profit and/or the net income can still be positive due to a positive investment income and/or a positive non-operating result.

Moreover, the usefulness of the combined ratio is inherently limited by the fact that it is a ratio and thus it does not provide information on the absolute amount of the underwriting result.

NEW BUSINESS MARGIN (NBM)

DEFINITION AND USEFULNESS

The new business margin is a common key performance indicator to measure the profitability of new business in our Life/Health segment. The NBM is calculated as the Value of new business (VNB) divided by the Present value of new business premiums (PVNBP). All three components are shown after non-controlling interests unless otherwise stated.

$$NBM_{LH\text{ Segment}} = \frac{\text{Value of new business (VNB)}}{\text{Present value of new business premium (PVNBP)}}$$

The VNB is the additional value to the shareholder which is created through the activity of writing new business in the current period. It is defined as the present value of future profits (PVFP) after acquisition expenses overrun or underrun, minus the time value of financial options and guarantees (O & G) and minus the risk margin (RM), all determined at the date of issue.

The PVNBP is the present value of projected new regular premiums, discounted with risk-free rates, plus the total amount of single premiums received.

VNB and PVNBP are determined by using an actuarial platform. In the actuarial platform, insurance contracts are projected deterministically using best estimate assumptions for lapse, mortality, disability and expenses until maturity. Contracts are projected no longer than 60 years. Premiums are before reinsurance. To receive a valid and meaningful NBM, the calculation of VNB and PVNBP need to be based on the same assumptions.

LIMITATIONS ON THE USEFULNESS

Limitations come from the best estimate assumptions, including risk-free rate, and the long projection period of up to 60 years. The best estimate assumptions are derived from historical data. That means that a different future customer behavior could lead to variances. The same is applicable for the risk-free rate, which is based on current market data. Furthermore, the long projection period is worthy of discussion, because changes such as regulatory changes or a new currency are not reflected in the projection.

COST-INCOME RATIO (CIR)

DEFINITION AND USEFULNESS

The Allianz Group uses the cost-income ratio as a key performance indicator in the Asset Management segment. The CIR sets operating expenses in relation to operating revenues in a given period.

$$\text{CIR}_{\text{AM Segment}} = \frac{\text{Operating expenses}^1}{\text{Operating revenues}^2}$$

1_Operating expenses consist of administrative expenses (net), excluding acquisition-related expenses.

2_Operating revenues are the sum of net fee and commission income, net interest income, income from financial assets and liabilities carried at fair value through income and other income. The term "net" means that the relevant expenses have already been deducted.

The Allianz Group uses CIR in order to measure the efficiency of its activities in the Asset Management segment. Changes in the ratio indicate a change in efficiency.

LIMITATIONS ON THE USEFULNESS

The CIR in a given period of time can be influenced by special items, one-offs or foreign exchange effects on the revenue and/or expense side which lead to a change in CIR without a long-term change of efficiency.

Moreover, the usefulness of the cost-income ratio is inherently limited by the fact that it is a ratio and thus it does not provide information on the absolute amount of the operating revenues and expenses.

TOTAL ASSETS UNDER MANAGEMENT (AUM)

DEFINITION AND USEFULNESS

Assets under management are assets or securities portfolios, valued at current market value, for which Allianz Asset Management companies provide discretionary investment management decisions and have the portfolio management responsibility. They are managed on behalf of third parties as well as on behalf of the Allianz Group.

AuM are a key performance indicator in the Allianz Group and the underlying of the success of our asset management activities in comparison with prior periods as well as in comparison with other companies.

Changes in AuM are driven by net flows, market and other, consolidation/deconsolidation effects and foreign exchange effects.

Net flows represent the sum of new clients' assets, additional contributions from existing clients – including dividend reinvestment – withdrawals of assets from, and termination of, client accounts and distributions to investors.

Market and other represents current income earned on, and changes in the fair value of, securities held in client accounts. It also includes dividends from net investment income and from net realized capital gains to investors of open ended mutual funds and of closed end funds.

Net flows as well as market and other define the real growth of the AuM base.

LIMITATIONS ON THE USEFULNESS

The volume of AuM reported is subject to fluctuations which do not derive from the success of our asset management activities. These fluctuations result from effects of foreign currency translation as well as acquisitions, disposals and transfers.

Reconciliations

TOTAL REVENUES

Total revenues comprise statutory gross premiums written in Property-Casualty and Life/Health, operating revenues in Asset Management, and total revenues in Corporate and Other (Banking).

Composition of total revenues

€ mn

	2018	2017
PROPERTY-CASUALTY		
Gross premiums written	53,636	52,262
LIFE/HEALTH		
Statutory premiums	70,450	67,277
ASSET MANAGEMENT		
Operating revenues	6,732	6,408
consisting of:		
Net fee and commission income	6,713	6,374
Net interest and similar income	3	8
Income from financial assets and liabilities carried at fair value through income (net)	5	25
Other income	11	1
CORPORATE AND OTHER		
thereof: Total revenues (Banking)	275	562
consisting of:		
Interest and similar income	95	419
Income from financial assets and liabilities carried at fair value through income (net) ¹	3	20
Fee and commission income	577	576
Other income	4	4
Interest expenses, excluding interest expenses from external debt	(24)	(133)
Fee and commission expenses	(382)	(325)
Consolidation effects within Corporate and Other	-	2
CONSOLIDATION	(535)	(360)
Allianz Group total revenues	130,557	126,149

¹Includes trading income.

INTERNAL GROWTH

The IFRS financial measure most directly comparable to internal growth is the nominal growth of total revenue growth.

Reconciliation of nominal total revenue growth to internal total revenue growth

%

	Internal Growth	Changes in scope of consolidation	Foreign currency translation	Nominal Growth
2018				
Property-Casualty	5.7	0.1	(3.2)	2.6
Life/Health	6.4	(0.1)	(1.6)	4.7
Asset Management	5.8	2.5	(3.2)	5.1
Corporate and Other	(4.0)	(49.3)	-	(51.1)
Allianz Group	6.1	(0.2)	(2.4)	3.5
2017				
Property-Casualty	2.3	0.4	(1.3)	1.4
Life/Health	7.0	(2.0)	(0.8)	4.1
Asset Management	7.8	0.2	(1.6)	6.4
Corporate and Other	1.9	-	-	1.9
Allianz Group	5.0	(0.9)	(1.0)	3.0

OPERATING PROFIT (OP)

Business segment information – reconciliation of operating profit (loss) to net income (loss)

€ mn	Property-Casualty	Life/Health	Asset Management	Corporate and Other	Consolidation	Group
2018						
Operating profit (loss)	5,725	4,152	2,530	(831)	(64)	11,512
Non-operating investment result						
Non-operating income from financial assets and liabilities carried at fair value through income (net) ¹	40	16	-	19	(7)	67
Non-operating realized gains/losses (net) ¹	663	134	-	156	(3)	951
Non-operating impairments of investments (net) ¹	(396)	(41)	-	(137)	-	(575)
Subtotal	307	108	-	38	(10)	443
Non-operating change in reserves for insurance and investment contracts (net) ¹	-	(22)	-	-	-	(22)
Interest expenses from external debt	-	-	-	(840)	-	(840)
Acquisition-related expenses	-	-	-	-	-	-
Non-operating amortization of intangible assets	(55)	(278)	(13)	(9)	-	(355)
Non-operating restructuring charges	(180)	(64)	(2)	(94)	-	(339)
Non-operating items	73	(256)	(15)	(905)	(10)	(1,113)
Income (loss) before income taxes	5,798	3,896	2,515	(1,736)	(74)	10,399
Income taxes	(1,496)	(1,059)	(593)	443	10	(2,696)
Net income (loss)	4,302	2,837	1,922	(1,294)	(63)	7,703
Net income (loss) attributable to:						
Non-controlling interests	66	166	73	(64)	-	241
Shareholders	4,236	2,671	1,848	(1,230)	(63)	7,462
2017						
Operating profit (loss)	5,053	4,412	2,440	(783)	(24)	11,097
Non-operating investment result						
Non-operating income from financial assets and liabilities carried at fair value through income (net) ¹	(5)	46	-	(71)	29	(1)
Non-operating realized gains/losses (net) ¹	609	137	(15)	108	194	1,033
Non-operating impairments of investments (net) ¹	(163)	(54)	-	(287)	-	(504)
Subtotal	442	129	(15)	(250)	223	528
Non-operating change in reserves for insurance and investment contracts (net) ¹	-	(61)	-	-	-	(61)
Interest expenses from external debt	-	-	-	(838)	-	(838)
Acquisition-related expenses	-	-	7	-	-	7
Non-operating amortization of intangible assets	(61)	(52)	(13)	(9)	-	(135)
Non-operating restructuring charges	(233)	(50)	(10)	(157)	-	(450)
Non-operating items	148	(34)	(31)	(1,254)	223	(949)
Income (loss) before income taxes	5,201	4,377	2,408	(2,037)	199	10,148
Income taxes	(1,394)	(1,410)	(862)	744	(19)	(2,941)
Net income (loss)	3,807	2,968	1,546	(1,293)	179	7,207
Net income (loss) attributable to:						
Non-controlling interests	167	146	73	16	1	404
Shareholders	3,640	2,821	1,473	(1,309)	178	6,803

¹ In investment terminology the term "net" is used when the relevant expenses have already been deducted.

RETURN ON EQUITY (ROE)

Return on equity represents net income attributable to shareholders divided by the average shareholders' equity excluding unrealized gains/losses on bonds net of shadow accounting at the beginning of the period and at the end of the period.

$$\text{RoE}_{\text{AZ Group}} = \frac{\text{Net income attributable to shareholders}}{(\text{Shareholders' equity}^{1,2} \text{ begin of period} + \text{Shareholders' equity}^{1,2} \text{ end of period})/2}$$

1_Shareholders' equity excluding non-controlling interests

2_Shareholders' equity excluding unrealized gains/losses on bonds net of shadow accounting

Reconciliation of return on equity for Allianz Group

€ mn

	2018	2017
Net income attributable to shareholders	7,462	6,803
Shareholders' equity bop	65,553	67,083
Shareholders' equity eop	61,232	65,553
Unrealized gains/losses on bonds (net of shadow accounting) bop	8,904	8,695
Unrealized gains/losses on bonds (net of shadow accounting) eop	4,894	8,904
Return on equity (excluding unrealized gains/losses on bonds net of shadow accounting) in %	13.2	11.8

For the Life/Health segment, RoE represents net income divided by the average total equity excluding unrealized gains/losses on bonds net of shadow accounting at the beginning of the period and at the end of the period.

$$\text{RoE}_{\text{LH Segment}} = \frac{\text{Total net income}}{(\text{Total equity}^1 \text{ begin of period} + \text{Total equity}^1 \text{ end of period})/2}$$

1_Total equity excluding unrealized gains/losses on bonds net of shadow accounting

Reconciliation of return on equity for the Life/Health segment

€ mn

	2018	2017
Net income attributable to shareholders	2,837	2,968
Shareholders' equity bop	30,151	30,695
Shareholders' equity eop	29,204	30,151
Unrealized gains/losses on bonds (net of shadow accounting) bop	6,208	5,721
Unrealized gains/losses on bonds (net of shadow accounting) eop	3,506	6,208
Return on equity (excluding unrealized gains/losses on bonds net of shadow accounting) in %	11.4	12.1

COMBINED RATIO (CR)

The combined ratio represents the total of acquisition and administrative expenses (net) and claims and insurance benefits incurred (net) divided by premiums earned (net).

$$\text{CR}_{\text{PC Segment}} = \frac{\text{Acq. and admin expenses (net) + Claims and ins. benefits inc. (net)}}{\text{Premiums earned (net)}}$$

Reconciliation of combined ratio

€ mn

	2018	2017
Claims and insurance benefits incurred (net)	(31,864)	(31,425)
Acquisition and administrative expenses (net), excluding one-off effects from pension revaluation	(13,542)	(13,537)
Premiums earned (net)	48,305	47,242
Combined ratio in %	94.0	95.2
Loss ratio in %	66.0	66.5
Expense ratio in %	28.0	28.7

NEW BUSINESS MARGIN (NBM)

There is no comparable IFRS financial measure. Therefore, a reconciliation is not possible. However, our calculation of NBM is consistent with the accounting policies we apply in our financial statements prepared in accordance with IFRS.

COST-INCOME RATIO (CIR)

The cost-income ratio sets operating expenses in relation to operating revenues in a given period.

$$\text{CIR}_{\text{AM Segment}} = \frac{\text{Operating expenses}}{\text{Operating revenues}}$$

Reconciliation of cost-income ratio

€ mn

	2018	2017
Operating expenses	(4,202)	(3,968)
Operating revenues	6,732	6,408
Cost-income ratio in %	62.4	61.9

TOTAL ASSETS UNDER MANAGEMENT (AUM)

There is no comparable IFRS financial measure. Therefore, a reconciliation is not possible. However, our calculation of AuM is consistent with the accounting policies we apply in our financial statements prepared in accordance with IFRS.

FORWARD-LOOKING APMs

An APM may not be reconcilable because it is not derived from the financial statements, such as profit estimates, future projections or profit forecasts. However, all forward-looking APMs are consistent with the accounting policies we apply in our financial statements prepared in accordance with IFRS.