VIII – Consolidated financial statements – Credit Suisse (Bank)

Report of the Statutory Auditor	435
Consolidated financial statements	437
Notes to the consolidated financial statements	444
Controls and procedures	514
Report of the Independent Registered Public Accounting Firm	515

Notes to the consolidated financial statements

1	Summary of significant accounting policies	444
2	Recently issued accounting standards	444
3	Business developments, significant shareholders and subsequent events	444
4	Segment information	445
5	Net interest income	446
6	Commissions and fees	446
7	Trading revenues	446
8	Other revenues	446
9	Provision for credit losses	446
10	Compensation and benefits	446
	General and administrative expenses	
12	Restructuring expenses	447
13	Revenue from contracts with customers	448
14	Securities borrowed, lent and subject to repurchase agreements	449
15	Trading assets and liabilities	449
16	Investment securities	450
17	Other investments	451
	Loans, allowance for loan losses and credit quality	
19	Premises and equipment	457
20	Goodwill	457
21	Other intangible assets	458
22	Other assets and other liabilities	458
	Deposits	
24	Long-term debt	459
25	Accumulated other comprehensive income	460
26	Offsetting of financial assets and financial liabilities	461
	Tax	
28	Employee deferred compensation	467
	Related parties	
30	Pension and other post-retirement benefits	471
31	Derivatives and hedging activities	478
	Guarantees and commitments	
33	Transfers of financial assets and variable interest entities	484
34	Financial instruments	490
	Assets pledged and collateral	
	Capital adequacy	
	Assets under management	
	Litigation	
39	Significant subsidiaries and equity method investments	511
	Significant valuation and income recognition differences between	
	US GAAP and Swiss GAAP banking law (true and fair view)	513



Report of the Statutory Auditor

To the General Meeting of Credit Suisse AG, Zurich

Report of the Statutory Auditor on the Consolidated Financial Statements

Opinion

As statutory auditor, we have audited the accompanying consolidated financial statements of Credit Suisse AG and subsidiaries (the "Bank"), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes. In our opinion, the consolidated financial statements give a true and fair view of the financial position as of December 31, 2018 and 2017, and the results of operations and the cash flows for each of the years in the three-year period ended December 31, 2018, in accordance with U.S. Generally Accepted Accounting Principles, and comply with Swiss law.

Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of the consolidated financial statements in accordance with U.S. Generally Accepted Accounting Principles and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm and are required to be independent with respect to the Bank. We conducted our audits in accordance with Swiss law and Swiss Auditing Standards and the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement whether due to fraud or error.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit **Oversight Authority**



Valuation of financial instruments reported at fair value



Goodwill



Valuation of deferred tax assets



Provisions for litigation and regulatory actions



Valuation of the allowance for loan losses



Controls over IT systems impacting financial reporting

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.



Valuation of financial instruments reported at fair value

Key Audit Matter

The Bank reports financial assets reported at fair value We assessed and tested the design and operating of CHF 283.7 billion and financial liabilities reported at fair value of CHF 182.5 billion as of December 31, 2018. with respect to the valuation of financial instruments These financial assets represented 37% of total assets and these financial liabilities represented 25% of total independent price verification, valuation model liabilities as of December 31, 2018.

The fair value of the majority of the Bank's financial instruments is based on quoted prices in active markets. For a sample of financial instruments, we examined the or observable inputs.

which no prices are available and which have little or no data. observable inputs. For these financial instruments fair value is determined through the application of valuation. For a sample of instruments which do not have directly techniques, which often involve the exercise of judgment observable market prices, we critically examined and by management including the use of assumptions and challenged the assumptions and models used or reestimates. In particular for financial instruments which do performed an independent valuation assessment, by not have directly observable market prices, judgment is reference to what we considered to be available often required to determine modelling assumptions that alternative methods and sensitivities to key factors. are used in the determination of fair value. The Bank also has certain financial instruments that utilize significant, We also evaluated the methodology and inputs used in judgmental inputs with varying degrees of observability determining key judgmental valuation adjustments for purposes of determining fair value. Further, the Bank (including credit, debit, and funding applies significant judgment in calculating certain adjustments) by critically examining and challenging valuation adjustments including credit, debit and funding these assumptions and models, and performing valuation adjustments.

Our response

effectiveness of the key controls over financial reporting reported at fair value. This included controls over approval and the calculation, validation and recording of valuation adjustments.

appropriateness of models used and valuation inputs or data. We compared observable inputs and data against In addition, the Bank holds financial instruments for independent sources and externally available market

valuation recalculations for a sample of these adjustments.



We made use of our own valuation specialists in performing the above procedures, in particular in relation to the most judgmental financial instruments, models, methodologies and assumptions.

For further information on the valuation of financial instruments reported at fair value refer to the following:

- Note 15 Trading assets and liabilities
- Note 34 Financial instruments



Goodwill

Key Audit Matter

The Bank reports goodwill totalling CHF 4.1 billion as of We assessed and tested the design and operating December 31, 2018. Goodwill is allocated to reporting effectiveness of the key controls over financial reporting units and the carrying value is primarily supported by the with respect to the valuation of goodwill. This included future cash flows of the underlying businesses. During controls over the annual impairment analysis, including 2018, the Bank determined that a goodwill triggering event occurred for the Asia Pacific - Markets, Global each reporting unit, the development and approval of Markets and Investment Banking & Capital Markets reporting units. Based on its goodwill impairment comparison of forecasts to past performance. analysis performed as of December 31, 2018, the Bank concluded no impairment was necessary.

Due to the inherent uncertainty associated with the forecasts used in determining the fair value of each reporting unit, this is an area in which significant judgment is applied. There is a greater degree of sensitivity to the impact of changes to estimates of future cash flows and other key assumptions for those reporting units where headroom between fair value and carrying reporting units where the impact of changes to key value is limited.

For further information on goodwill refer to the following:

Note 20 Goodwill



Valuation of deferred tax assets

Kev Audit Matter

4.6 billion as of December 31, 2018.

Our response

the assumptions used in determining the fair value of the financial plan, and management's annual

We evaluated the reasonableness of cash flow projections and compared key inputs, such as the discount rates and growth rates, to externally available industry, economic and financial data and the Bank's With the own historical data and performance. assistance of our own valuation specialists, we critically examined and challenged the assumptions and methodologies used to calculate fair value for those estimates and assumptions was most sensitive.

Our response

The Bank reports net deferred tax assets totalling CHF We assessed and tested the design and operating effectiveness of the key controls over financial reporting with respect to the valuation of deferred tax assets. This Significant judgment is required in relation to deferred included controls over the recognition and measurement tax assets as their recoverability is dependent on of deferred tax assets, the assessment and approval of forecasts of future profitability over a number of years. assumptions used in projecting the future taxable profits The most significant deferred tax assets arise in the US. in relevant jurisdictions / legal entities, the development and approval of the legal entity plans, and management's annual comparison of legal entity plans to past performance.



We substantively tested management's process for valuing deferred tax assets critically examining management's analysis and comparing assumptions used in the forecast to independently obtained data points. We also examined the consistency between the financial plan used for goodwill impairment purposes and the legal entity plans used in the valuation of deferred tax assets.

For further information on the valuation of deferred tax assets refer to the following:

Note 27 Tax



Provisions for litigation and regulatory actions

Key Audit Matter

The Bank is involved in a number of judicial, regulatory We assessed and tested the design and operating Consequently, the calculations of the provisions are disclosure. subject to inherent uncertainty as they rely on amount of liabilities arising from litigation and regulatory claims.

Our response

and arbitration proceedings concerning matters arising effectiveness of the key controls over financial reporting in connection with the conduct of its businesses. The with respect to provisions for litigation and regulatory outcome of such cases is dependent on the future actions. This included controls over the valuation of the outcome of continuing legal and regulatory processes. litigation provisions and their approval, review and

management judgment about the likelihood and We evaluated the Bank's assessment of the nature and status of litigation, claims and regulatory actions. We considered the legal advice received by the Bank from inhouse counsel, as well as external counsel, when relevant, for certain of the more significant cases.

> We examined the Bank's conclusions with respect to the provisions and disclosures made for significant cases, considering the results of corroborative information obtained from management. In view of the significance of the judgments required, we examined the more significant provisions in detail. For the significant cases, we obtained correspondence directly from the Bank's outside attorneys and, where appropriate, performed corroborative inquiry of outside counsel and tested data and inputs used by management in determining their litigation provisions.

For further information on provisions for litigation and regulatory actions refer to the following:

Note 38 Litigation





Valuation of the allowance for loan losses

Key Audit Matter

involves judgment to estimate the recoverable amount that were not captured by management's models. and the collateral value. The collective allowance for allowance at a portfolio level.

Our response

The Bank reports gross loans held at amortized cost of We assessed and tested the design and operating CHF 279.0 billion and has recorded an allowance for effectiveness of the key controls over financial reporting loan losses of CHF 0.9 billion as of December 31, 2018. with respect to the valuation of the allowance for loan losses. This included controls over the calculation, The valuation of the allowance for loan losses relies on approval, recording and monitoring of the allowance for the application of significant management judgment loan losses. This also included controls over model and the use of different modelling techniques and approval, validation and approval of key data inputs and assumptions. The specific allowance for loan losses the qualitative considerations for potential impairment

loan losses involves judgment in determining the For a sample of loan loss allowances calculated on an methodology and parameters in calculating the individual basis we tested the assumptions underlying the impairment identification and quantification including forecasts of future cash flows, valuation of underlying collateral and estimates of recovery on default. We also examined a sample of loans which had not been identified by management as impaired and formed our own opinion about collectability.

> For a sample of loan loss allowances calculated on a collective basis we tested the underlying models including the model approval and validation process. We also tested the reasonableness of the inputs to those models, such as recovery rates, by comparing data and assumptions made to external benchmarks, when available.

For further information on the valuation of allowance for loan losses refer to the following:

Note 18 Loans, allowance for loan losses and credit quality



Controls over IT systems impacting financial reporting

Key Audit Matter

The Bank is dependent on technology due to the significant number of transactions that are processed daily across the Bank's businesses. The Bank's IT infrastructure and applications are an integral component of its operations and financial reporting framework. Appropriate IT controls are required to ensure transactions are processed correctly and to mitigate the risk of fraud and error.

Our response

We assessed the design of the general IT controls for the Bank's key systems relevant to financial reporting.

We tested the operating effectiveness of the Bank's general IT controls including user access and provisioning (including system enforced segregation of duties), physical access, change management, information security, incident management, and back-up and restoration protocols. Our work included testing whether access requests were appropriately authorised in line with the Bank's general IT controls framework and, where required, the effective operation of compensating IT or business controls. Additionally, our work included testing selected system interface controls to confirm the completeness and accuracy of data



transfers between systems.

In performing our work, we included IT specialists as part of our audit team.

Report on Other Legal and Regulatory Requirements

We are a public accounting firm registered with the Swiss Federal Audit Oversight Authority (FAOA) and the PCAOB and we confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA). We are independent of the Bank in accordance with Swiss law (article 728 CO and article 11 AOA) and U.S. federal securities laws as well as the applicable rules and regulations of the Swiss audit profession, the U.S. Securities and Exchange Commission and the PCAOB, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

We also have audited, in accordance with the standards of the PCAOB, the Bank's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated March 22, 2019 expressed an unqualified opinion on the effectiveness of the Bank's internal control over financial reporting.

We have served as the auditor of Credit Suisse AG since 1989.

KPMG AG

Nicholas Edmonds Licensed Audit Expert Auditor in Charge

Zurich, Switzerland March 22, 2019 Anthony Anzevino Global Lead Partner

KPMG AG, Badenerstrasse 172, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.

Consolidated financial statements

Consolidated statements of operations

in	Note	2018	2017	2016
Consolidated statements of operations (CHF million)				
Interest and dividend income	5	19,623	17,061	17,375
Interest expense	5	(12,498)	(10,369)	(9,781)
Net interest income	5	7,125	6,692	7,594
Commissions and fees	6	11,742	11,672	10,938
Trading revenues	7	456	1,300	371
Other revenues	8	1,497	1,301	1,490
Net revenues		20,820	20,965	20,393
Provision for credit losses	9	245	210	252
Compensation and benefits	10	8,864	9,964	10,777
General and administrative expenses	11	7,068	7,413	9,885
Commission expenses		1,259	1,429	1,455
Restructuring expenses	12	528	396	513
Total other operating expenses		8,855	9,238	11,853
Total operating expenses		17,719	19,202	22,630
Income/(loss) before taxes		2,856	1,553	(2,489)
Income tax expense	27	1,134	2,781	400
Net income/(loss)		1,722	(1,228)	(2,889)
Net income/(loss) attributable to noncontrolling interests		(7)	27	(6)
Net income/(loss) attributable to shareholders		1,729	(1,255)	(2,883)

Consolidated statements of comprehensive income

in	2018	2017	2016
Comprehensive income/(loss) (CHF million)			
Net income/(loss)	1,722	(1,228)	(2,889)
Gains/(losses) on cash flow hedges	(7)	(35)	(22)
Foreign currency translation	(321)	(1,015)	498
Unrealized gains/(losses) on securities	(18)	(13)	1
Actuarial gains/(losses)	31	21	210
Net prior service credit/(cost)	(10)	0	0
Gains/(losses) on liabilities related to credit risk	1,442	(1,684)	(1,082)
Other comprehensive income/(loss), net of tax	1,117	(2,726)	(395)
Comprehensive income/(loss)	2,839	(3,954)	(3,284)
Comprehensive income/(loss) attributable to noncontrolling interests	(3)	(9)	11
Comprehensive income/(loss) attributable to shareholders	2,842	(3,945)	(3,295)

Consolidated balance sheets

end of	Note	2018	2017
Assets (CHF million)			
Cash and due from banks		99,314	109,510
of which reported at fair value		115	212
of which reported from consolidated VIEs		173	232
Interest-bearing deposits with banks		1,074	721
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	14	117,095	115,346
of which reported at fair value		81,818	77,498
Securities received as collateral, at fair value		41,696	38,074
of which encumbered		25,711	23,632
Trading assets, at fair value	15	132,427	156,774
of which encumbered		32,452	49,237
of which reported from consolidated VIEs		1,616	1,348
Investment securities	16	2,909	2,189
of which reported at fair value		2,909	2,189
of which reported from consolidated VIEs		1,432	381
Other investments	17	4,824	5,893
of which reported at fair value		2,430	3,497
of which reported from consolidated VIEs		1,505	1,833
Net loans	18	292,875	283,237
of which reported at fair value		14,873	15,307
of which encumbered		230	186
of which reported from consolidated VIEs		387	267
allowance for loan losses		(901)	(881)
Premises and equipment	19	4,530	4,445
of which reported from consolidated VIEs		18	128
Goodwill	20	4,056	4,036
Other intangible assets	21	219	223
of which reported at fair value		163	158
Brokerage receivables		38,907	46,968
Other assets	22	32,143	30,956
of which reported at fair value		7,263	9,018
of which encumbered		279	134
of which reported from consolidated VIEs		2,009	2,396
Total assets		772,069	798,372

Consolidated balance sheets (continued)

end of	Note	2018	2017
Liabilities and equity (CHF million)			
Due to banks	23	15,220	15,411
of which reported at fair value		406	197
Customer deposits	23	365,263	362,303
of which reported at fair value		3,292	3,511
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	14	24,623	26,496
of which reported at fair value		14,828	15,262
Obligation to return securities received as collateral, at fair value		41,696	38,074
Trading liabilities, at fair value	15	42,171	39,132
of which reported from consolidated VIEs		3	3
Short-term borrowings		22,419	26,378
of which reported at fair value		8,068	11,019
of which reported from consolidated VIEs		5,465	6,672
Long-term debt	24	153,433	172,042
of which reported at fair value		63,027	62,622
of which reported from consolidated VIEs		1,764	863
Brokerage payables		30,923	43,303
Other liabilities	22	30,327	31,683
of which reported at fair value		8,983	8,590
of which reported from consolidated VIEs		277	441
Total liabilities		726,075	754,822
Common shares		4,400	4,400
Additional paid-in capital		45,557	45,718
Retained earnings		10,179	8,484
Accumulated other comprehensive income/(loss)	25	(14,840)	(15,932)
Total shareholders' equity		45,296	42,670
Noncontrolling interests		698	880
Total equity		45,994	43,550
Total liabilities and equity		772,069	798,372

end of	2018	2017
Additional share information		
Par value (CHF)	1.00	1.00
Issued shares	4,399,680,200	4,399,680,200
Shares outstanding	4,399,680,200	4,399,680,200

The Bank's total share capital is fully paid and consists of 4,399,680,200 registered shares as of December 31, 2018. Each share is entitled to one vote. The Bank has no warrants on its own shares outstanding.

Consolidated statements of changes in equity

	Attributable to shareholders							
	Common shares	Additional paid-in capital	Retained earnings	Treasury shares, at cost 1	AOCI	Total share- holders' equity	Non- controlling interests	Total equity
2018 (CHF million)								
Balance at beginning of period	4,400	45,718	8,484	0	(15,932)	42,670	880	43,550
Purchase of subsidiary shares from non- controlling interests, changing ownership	-	(1)	_	-	_	(1)	(4)	(5)
Purchase of subsidiary shares from non- controlling interests, not changing ownership ^{2, 3}	-	_	_	_	_	-	(70)	(70)
Sale of subsidiary shares to noncontrolling interests, changing ownership	_	2	_	_	_	2	(2)	_
Sale of subsidiary shares to noncontrolling interests, not changing ownership ³	_	_	_	_	_	_	30	30
Net income/(loss)	_	_	1,729	_	_	1,729	(7)	1,722
Cumulative effect of accounting changes, net of tax	-	_	(24)	_	(21)	(45)	_	(45)
Total other comprehensive income/(loss), net of tax	_	-	-	-	1,113	1,113	4	1,117
Share-based compensation, net of tax	_	(140)	-	-	-	(140)	_	(140)
Dividends on share-based compensation, net of tax	_	(22)	_	_	_	(22)	_	(22)
Dividends paid	_	-	(10)	-	-	(10)	(5)	(15)
Changes in scope of consolidation, net	_	-	-	-	-	-	(128)	(128)
Balance at end of period	4,400	45,557	10,179	0	(14,840)	45,296	698	45,994
2017 (CHF million)								
Balance at beginning of period	4,400	41,817	9,814	0	(13,242)	42,789	1,069	43,858
Purchase of subsidiary shares from non- controlling interests, not changing ownership	_	_	_	_	_	_	(189)	(189)
Sale of subsidiary shares to noncontrolling interests, not changing ownership	_	_	_	_	_	_	65	65
Net income/(loss)	_	-	(1,255)	-	-	(1,255)	27	(1,228)
Cumulative effect of accounting changes, net of tax	_	-	(25)	-	-	(25)	-	(25)
Total other comprehensive income/(loss), net of tax	_	-	-	-	(2,690)	(2,690)	(36)	(2,726)
Share-based compensation, net of tax	_	6	-	-	-	6	-	6
Dividends on share-based compensation, net of tax	_	(79)	-	-	-	(79)	-	(79)
Dividends paid	_	-	(10)	-	-	(10)	(3)	(13)
Changes in scope of consolidation, net	_	_	_	_	-		(41)	(41)
Other	_	3,974	(40)	_	_	3,934	(12)	3,922
Balance at end of period	4,400	45,718	8,484	0	(15,932)	42,670	880	43,550

¹ Reflects Credit Suisse Group shares which are reported as treasury shares. Those shares are held to economically hedge share award obligations.

² Distributions to owners in funds include the return of original capital invested and any related dividends.

³ Transactions with and without ownership changes related to fund activity are all displayed under "not changing ownership".

Consolidated statements of changes in equity (continued)

					Attributable to	shareholders		
	Common shares/ participa- tion secu- rities	Additional paid-in capital	Retained earnings	Treasury shares, at cost	AOCI	Total share- holders' equity	Non- controlling interests	Total equity
2016 (CHF million)								
Balance at beginning of period	4,400	40,999	13,307	0	(13,294)	45,412	1,284	46,696
Purchase of subsidiary shares from non- controlling interests, changing ownership	_	(13)	_	_	_	(13)	(6)	(19)
Purchase of subsidiary shares from non- controlling interests, not changing ownership	_	_	_	_	_	_	(118)	(118)
Sale of subsidiary shares to noncontrolling interests, not changing ownership	_	_	_	_	_	_	120	120
Net income/(loss)	-	_	(2,883)	_	_	(2,883)	(6)	(2,889)
Cumulative effect of accounting changes, net of tax	_	_	(464)	_	464	_	_	_
Total other comprehensive income/(loss), net of tax	_	_	_	-	(412)	(412)	17	(395)
Share-based compensation, net of tax	_	168	_	-	_	168	_	168
Dividends on share-based compensation, net of tax	_	(41)	_	_	_	(41)	_	(41)
Dividends paid	_	_	(146)	_	_	(146)	_	(146)
Changes in scope of consolidation, net	_	2	-	-	_	2	(194)	(192)
Other	_	702	-	-	_	702	(28)	674
Balance at end of period	4,400	41,817	9,814	0	(13,242)	42,789	1,069	43,858

Consolidated statements of cash flows

in	2018	2017	2016
Operating activities (CHF million)			
Net income/(loss)	1,722	(1,228)	(2,889)
Adjustments to reconcile net income/(loss) to net cash provided by/(used in) operating activities (CHF million)			
Impairment, depreciation and amortization	844	837	934
Provision for credit losses	245	210	252
Deferred tax provision/(benefit)	592	2,285	(234)
Share of net income/(loss) from equity method investments	(107)	(150)	(62)
Trading assets and liabilities, net	25,388	3,441	21,214
(Increase)/decrease in other assets	3,519	(15,435)	9,731
Increase/(decrease) in other liabilities	(14,228)	(1,443)	(1,021)
Other, net	(5,564)	2,993	(917)
Total adjustments	10,689	(7,262)	29,897
Net cash provided by/(used in) operating activities	12,411	(8,490)	27,008
Investing activities (CHF million)			
(Increase)/decrease in interest-bearing deposits with banks	(364)	40	117
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	(1,372)	14,286	(7,056)
Purchase of investment securities	(683)	(86)	(88)
Proceeds from sale of investment securities	255	14	14
Maturities of investment securities	853	422	363
Investments in subsidiaries and other investments	(546)	(1,094)	(1,357)
Proceeds from sale of other investments	1,770	1,967	1,693
(Increase)/decrease in loans	(13,701)	(14,779)	(4,221)
Proceeds from sales of loans	5,981	9,938	2,468
Capital expenditures for premises and equipment and other intangible assets	(989)	(950)	(1,164)
Proceeds from sale of premises and equipment and other intangible assets	80	60	55
Other, net	342	65	750
Net cash provided by/(used in) investing activities	(8,374)	9,883	(8,426)

Consolidated statements of cash flows (continued)

in	2018	2017	2016
Financing activities (CHF million)			
Increase/(decrease) in due to banks and customer deposits	2,006	3,187	10,237
Increase/(decrease) in short-term borrowings	(2,985)	5,507	6,594
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(2,052)	(5,251)	(14,525)
Issuances of long-term debt	33,308	43,567	52,944
Repayments of long-term debt	(43,858)	(62,644)	(47,132)
Dividends paid	(15)	(13)	(145)
Other, net	(657)	3,535	1,044
Net cash provided by/(used in) financing activities	(14,253)	(12,112)	9,017
Effect of exchange rate changes on cash and due from banks (CHF million)			
Effect of exchange rate changes on cash and due from banks	20	(837)	1,213
Net increase/(decrease) in cash and due from banks (CHF million)			
Net increase/(decrease) in cash and due from banks	(10,196)	(11,556)	28,812
Cash and due from banks at beginning of period ¹	109,510	121,066	92,254
Cash and due from banks at end of period ¹	99,314	109,510	121,066

¹ Includes restricted cash.

Supplemental cash flow information

in	2018	2017	2016
Cash paid for income taxes and interest (CHF million)			
Cash paid for income taxes	666	531	659
Cash paid for interest	12,524	9,688	9,105
Assets and liabilities sold in business divestitures (CHF million)			
Assets sold	0	1,777	425
Liabilities sold	0	1,658	383

Notes to the consolidated financial statements

1 Summary of significant accounting policies

The accompanying consolidated financial statements of Credit Suisse AG (the Bank), the direct bank subsidiary of Credit Suisse Group AG (the Group), are prepared in accordance with accounting principles generally accepted in the US (US GAAP) and are stated in Swiss francs (CHF). The financial year for the Bank ends on December 31. Certain reclassifications have been made to the prior year's consolidated financial statements to conform to the current presentation which had no impact on net income/ (loss) or total shareholders' equity.

In preparing the consolidated financial statements, management is required to make estimates and assumptions including, but not limited to, the fair value measurements of certain financial assets and liabilities, the allowance for loan losses, the evaluation of variable interest entities (VIEs), the impairment of assets other than loans, recognition of deferred tax assets, tax uncertainties, pension liabilities and various contingencies. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the dates of the consolidated balance sheets and the reported amounts of revenues and expenses during the reporting period. While management evaluates its estimates and assumptions on an ongoing basis, actual results could differ materially from management's estimates. Market conditions may increase the risk and complexity of the judgments applied in these estimates.

→ Refer to "Note 1 - Summary of significant accounting policies" in VI - Consolidated financial statements - Credit Suisse Group for a summary of significant accounting policies, with the exception of the following accounting policies.

Pension and other post-retirement benefits

Credit Suisse sponsors a Group defined benefit pension plan in Switzerland that covers eligible employees of the Bank domiciled in Switzerland. The Bank also has single-employer defined benefit pension plans and defined contribution pension plans in Switzerland and other countries around the world.

For the Bank's participation in the Group defined benefit pension plan, no retirement benefit obligation is recognized in the consolidated balance sheets of the Bank and defined contribution accounting is applied, as the Bank is not the sponsoring entity of the Group plan.

For single-employer defined benefit plans, the Bank uses the projected unit credit actuarial method to determine the present value of its projected benefit obligations (PBO) and the current and past service costs or credits related to its defined benefit and other post-retirement benefit plans. The measurement date used to perform the actuarial valuation is December 31.

→ Refer to "Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group – Note 1 – Summary of significant accounting policies for further information.

Own shares, own bonds and financial instruments on Group shares

The Bank's shares are wholly owned by Credit Suisse Group AG and are not subject to trading. The Bank may buy and sell Credit Suisse Group AG shares (Group shares) and Group bonds, own bonds and financial instruments on Group shares within its normal trading and market-making activities. In addition, the Bank may hold Group shares to economically hedge commitments arising from employee share-based compensation awards. Group shares are reported as trading assets, unless those shares are held to economically hedge share award obligations. Hedging shares are reported as treasury shares, resulting in a reduction to total shareholder's equity. Financial instruments on Group shares are recorded as assets or liabilities and carried at fair value. Dividends received on Group shares and unrealized and realized gains and losses on Group shares are recorded according to the classification of the shares as trading assets or treasury shares. Purchases of bonds originally issued by the Bank are recorded as an extinguishment of debt.

2 Recently issued accounting standards

→ Refer to "Note 2 - Recently issued accounting standards" in VI - Consolidated financial statements - Credit Suisse Group for recently adopted accounting standards and standards to be adopted in future periods. The impact on the Bank's and Group's financial position, results of operations or cash flows was or is expected to be identical.

3 Business developments, significant shareholders and subsequent events

→ Refer to "Note 3 – Business developments, significant shareholders and subsequent events" in VI – Consolidated financial statements – Credit Suisse Group for further information.

4 Segment information

For the purposes of the presentation of reportable segments, the Bank has included accounts of affiliate entities wholly owned by the same parent which are managed together with the operating segments of the Bank.

→ Refer to "Note 4 – Segment information" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Net revenues and income/(loss) before taxes				
in	2018	2017	2016	
Net revenues (CHF million)				
Swiss Universal Bank	5,564	5,396	5,759	
International Wealth Management	5,414	5,111	4,698	
Asia Pacific	3,393	3,504	3,597	
Global Markets	4,980	5,551	5,497	
Investment Banking & Capital Markets	2,177	2,139	1,972	
Strategic Resolution Unit	(708)	(886)	(1,271)	
Adjustments ¹	0	150	141	
Net revenues	20,820	20,965	20,393	
Income/(loss) before taxes (CHF millio	n)			
Swiss Universal Bank	2,125	1,765	2,025	
International Wealth Management	1,705	1,351	1,121	
Asia Pacific	664	729	725	
Global Markets	154	450	48	
Investment Banking & Capital Markets	344	369	261	
Strategic Resolution Unit	(1,381)	(2,135)	(5,759)	
Adjustments ¹	(755)	(976)	(910)	
Income/(loss) before taxes	2,856	1,553	(2,489)	

¹ Adjustments represent certain consolidating entries and balances, including those relating to items that are managed but are not legally owned by the Bank and vice versa, and certain expenses that were not allocated to the segments.

Total assets				
end of	2018	2017		
Total assets (CHF million)				
Swiss Universal Bank	224,301	228,857		
International Wealth Management	91,835	94,753		
Asia Pacific	99,809	96,497		
Global Markets	211,530	242,159		
Investment Banking & Capital Markets	16,156	20,803		
Strategic Resolution Unit	20,874	45,629		
Adjustments ¹	107,564	69,674		
Total assets	772,069	798,372		

1 Adjustments represent certain consolidating entries and balances, including those relating to items that are managed but are not legally owned by the Bank and vice versa, and certain expenses that were not allocated to the segments.

Net revenues and income/(loss) before taxes by geographical location

in	2018	2017	2016
Net revenues (CHF million)			
Switzerland	8,047	8,015	8,484
EMEA	1,164	1,042	2,036
Americas	8,750	8,952	7,267
Asia Pacific	2,859	2,956	2,606
Net revenues	20,820	20,965	20,393
Income/(loss) before taxes (CHF mi	llion)		
Switzerland	1,927	1,648	1,955
EMEA	(2,520)	(2,825)	(2,487)
Americas	3,344	2,660	(1,602)
Asia Pacific	105	70	(355)
Income/(loss) before taxes	2,856	1,553	(2,489)

The designation of net revenues and income/(loss) before taxes is based on the location of the office recording the transactions. This presentation does not reflect the way the Bank is managed.

Total assets by geographical location				
2018	2017			
237,200	243,767			
149,715	154,179			
309,616	318,358			
75,538	82,068			
772,069	798,372			
	237,200 149,715 309,616 75,538			

The designation of total assets by region is based upon customer domicile.

5 Net interest income

in	2018	2017	2016
Net interest income (CHF million)			
Loans	6,778	5,981	5,627
Investment securities	80	47	60
Trading assets	7,131	6,698	7,483
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,856	2,515	2,767
Other	2,778	1,820	1,438
Interest and dividend income	19,623	17,061	17,375
Deposits	(2,291)	(1,360)	(1,047)
Short-term borrowings	(370)	(168)	(84)
Trading liabilities	(3,453)	(3,546)	(3,602)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(1,877)	(1,284)	(1,387)
Long-term debt	(3,696)	(3,580)	(3,460)
Other	(811)	(431)	(201)
Interest expense	(12,498)	(10,369)	(9,781)
Net interest income	7,125	6,692	7,594

8 Other revenues

in	2018	2017	2016
Other revenues (CHF million)			
Loans held-for-sale	(4)	3	(51)
Long-lived assets held-for-sale	39	(18)	437
Equity method investments	221	229	205
Other investments	335	81	7
Other	906	1,006	892
Other revenues	1,497	1,301	1,490

9 Provision for credit losses

in	2018	2017	2016
Provision for credit losses (CHF million)			
Provision for loan losses	201	190	249
Provision for lending-related and other exposures	44	20	3
Provision for credit losses	245	210	252

6 Commissions and fees

in	2018	2017	2016
Commissions and fees (CHF million)			
Lending business	1,902	1,809	1,790
Investment and portfolio management	3,415	3,320	3,043
Other securities business	83	82	72
Fiduciary business	3,498	3,402	3,115
Underwriting	1,735	1,817	1,364
Brokerage	2,797	3,006	3,029
Underwriting and brokerage	4,532	4,823	4,393
Other services	1,810	1,638	1,640
Commissions and fees	11,742	11,672	10,938

10 Compensation and benefits

Compensation and benefits	8,864	9,964	10,777
Other	848 ¹	923	1,028
Social security	567	620	691
Salaries and variable compensation	7,449	8,421	9,058
Compensation and benefits (CHF millio	n)		
in	2018	2017	2016

1 Includes pension-related expenses of CHF 533 million in 2018 relating to service costs for defined benefit pension plans and employer contributions for defined contribution pension plans.

7 Trading revenues

Total	456	1,300	371
Other products	(199)	(4)	354
Commodity and energy products	102	86	177
Credit products	(97)	(1,096)	(2,124)
Equity/index-related products	(481)	(2,895)	(1,738)
Foreign exchange products	372	1,991	(3,461)
Interest rate products	759	3,218	7,163
Trading revenues (CHF million)			
in	2018	2017	2016

Represents revenues on a product basis which are not representative of business results within segments, as segment results utilize financial instruments across various product types.

→ Refer to "Note 7 – Trading revenues" in VI – Consolidated financial statements – Credit Suisse Group for further information.

11 General and administrative expenses

in	2018	2017	2016
General and administrative expenses (CH	IF million)		
Occupancy expenses	855	935	999
IT, machinery, etc.	926	1,005	1,160
Provisions and losses	433	697	3,009
Travel and entertainment	310	299	316
Professional services	2,991	3,019	2,966
Amortization and impairment of other intangible assets	9	9	8
Other	1,544 ¹	1,449	1,427
General and administrative expenses	7,068	7,413	9,885

1 Includes pension-related expenses/(credits) of CHF 32 million in 2018 relating to certain components of net periodic benefit costs for defined benefit plans.

12 Restructuring expenses

Restructuring expenses by segment				
in	2018	2017	2016	
Restructuring expenses by segment (CH	IF million)			
Swiss Universal Bank	101	59	60	
International Wealth Management	115	70	54	
Asia Pacific	61	63	53	
Global Markets	242	150	217	
Investment Banking & Capital Markets	84	42	28	
Strategic Resolution Unit	21	57	121	
Corporate Center	2	14	7	
Adjustments ¹	(98)	(59)	(27)	
Total restructuring expenses	528	396	513	

¹ Adjustments represent certain consolidating entries and balances, including those relating to items that are managed but are not legally owned by the Bank and vice versa.

Restructuring expenses by type							
in	2018	2017	2016				
Restructuring expenses by type (CHF million	1)						
Compensation and benefits-related expenses	233	286	358				
of which severance expenses	157	188	218				
of which accelerated deferred compensation	76	98	140				
General and administrative-related expenses	295	110	155				
Total restructuring expenses	528	396	513				

In connection with the ongoing implementation of the revised Bank strategy, restructuring expenses of CHF 528 million, CHF 396 million and CHF 513 million were recognized in 2018, 2017 and 2016, respectively.

→ Refer to "Note 12 – Restructuring expenses" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Restructuring provision									
			2018			2017			2016
in		General and administrative expenses	Total		General and administrative expenses	Total	Compensation and benefits	General and administrative expenses	Total
Restructuring provision (CHF million)									
Balance at beginning of period	191	110	301	217	94	311	187	12	199
Net additional charges ¹	157	216	373	188	86	274	218	137	355
Utilization	(196)	(136)	(332)	(214)	(70)	(284)	(188)	(55)	(243)
Balance at end of period	152	190	342	191	110	301	217	94	311

¹ The following items for which expense accretion was accelerated in 2018, 2017 and 2016 due to the restructuring of the Bank are not included in the restructuring provision: unsettled share-based compensation of CHF 55 million, CHF 67 million and CHF 34 million, respectively; unsettled cash-based deferred compensation of CHF 21 million, CHF 31 million and CHF 106 million, respectively, which remain classified as compensation liabilities; and accelerated accumulated depreciation and impairment of CHF 79 million, CHF 24 million and CHF 18 million, respectively, which remain classified as premises and equipment. The settlement date for the unsettled share-based compensation remains unchanged at three years.

13 Revenue from contracts with customers

Contracts with customers and disaggregation of revenues

in	4Q18	3Q18	2Q18	1Q18
Contracts with customers (CHF	million)			
Investment and portfolio management	ent 866	856	850	843
Other securities business	18	21	21	23
Underwriting	330	422	513	470
Brokerage	647	605	748	812
Other services	513	470	476	490
Total revenues from contracts with customers	2,374	2,374	2,608	2,638

The table above differs from "Note 6 – Commissions and fees" as it includes only those contracts with customers that are in scope of ASC Topic 606 – Revenue from Contracts with Customers.

4Q18	3Q18	2Q18	1Q18
n)			
789	883	824	745
56	66	63	67
ng pilities I 16	7	13	13
	789 56 ng oilities	789 883 56 66 ng oilities	789 883 824 56 66 63 ng oilities

The Bank did not recognize any revenues in the reporting period from performance obligations satisfied in previous periods.

In 2018, we recognized a net impairment loss on contract receivables of CHF 2 million in the fourth quarter, CHF 6 million in the third quarter and CHF 3 million in the second quarter. No impairment losses were recognized on contract receivables in the first quarter of 2018. The Bank did not recognize any contract assets during the fourth quarter, the third quarter, the second quarter and the first quarter of 2018.

→ Refer to "Note 14 – Revenue from contracts with customers" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Capitalized costs

The Bank has not incurred costs in obtaining a contract nor costs to fulfill a contract that are eligible for capitalization.

Remaining performance obligations

ASC Topic 606's practical expedient allows the Bank to exclude from its remaining performance obligations disclosure any performance obligations which are part of a contract with an original expected duration of one year or less. Additionally, any variable consideration, for which it is probable that a significant reversal in the amount of cumulative revenue recognized will occur when the uncertainty associated with the variable consideration is subsequently resolved, is not subject to the remaining performance obligations disclosure because such variable consideration is not included in the transaction price (e.g., investment management fees). Upon review, the Bank determined that no material remaining performance obligations are in scope of the remaining performance obligations disclosure.

Impact of the adoption of ASC Topic 606

The impact of adoption of ASC Topic 606 on the Bank's consolidated statement of operations resulted in increases in commissions and fees revenues of CHF 12 million, CHF 19 million, CHF 23 million and CHF 20 million, increases in other revenues of CHF 7 million, CHF 2 million, CHF 6 million and CHF 5 million, increases in general and administrative expenses of CHF 33 million, CHF 47 million, CHF 54 million and CHF 45 million and decreases in commission expenses of CHF 12 million, CHF 25 million, CHF 29 million and CHF 22 million for the fourth quarter, the third quarter, the second quarter and the first quarter of 2018, respectively. The impact of the adoption did not have a material impact on the Banks's consolidated balance sheet or the Bank's consolidated statement of cash flows in the fourth quarter, the third quarter, the second quarter and the first quarter of 2018.

14 Securities borrowed, lent and subject to repurchase agreements

end of	2018	2017
Securities borrowed or purchased under agreements to resell (CHF million)		
Central bank funds sold and securities purchased under resale agreements	77,770	70,009
Deposits paid for securities borrowed	39,325	45,337
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	117,095	115,346
Securities lent or sold under agreements to repurchase (CHF million)		
Central bank funds purchased and securities sold under repurchase agreements	20.305	20,606
Deposits received for securities lent	4,318	5,890
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	24,623	26,496

other liabilities.

15 Trading assets and liabilities

end of	2018	2017
Trading assets (CHF million)		
Debt securities	62,216	72,826
Equity securities	46,517	55,822
Derivative instruments ¹	18,402	19,900
Other	5,292	8,226
Trading assets	132,427	156,774
Trading liabilities (CHF million)		
Short positions	26,948	24,478
Derivative instruments ¹	15,223	14,654
Trading liabilities	42,171	39,132

 $^{{\}bf 1}$ Amounts shown after counterparty and cash collateral netting.

Cash collateral paid	20,333	23,587						
Cash collateral received	13,213	14,996						
Cash collateral on derivative instruments – not netter	d (CHF millio	n) ²						
Cash collateral paid	7,057	5,142						
Cash collateral received	6,903	8,644						
Recorded as cash collateral netting on derivative instruments in Note 26 – Offsetting of financial assets and financial liabilities. Recorded as cash collateral on derivative instruments in Note 22 – Other assets and								

Cash collateral on derivative instruments – netted (CHF million) 1

2017

[→] Refer to "Note 15 – Securities borrowed, lent and subject to repurchase agreements" in VI – Consolidated financial statements – Credit Suisse Group for further information.

16 Investment securities

end of	2018	2017
Investment securities (CHF million)		
Securities available-for-sale	2,909	2,189
Total investment securities	2,909	2,189

Investment securities by type

				2018				2017
end of	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Investment securities by type (CHF million)								
Debt securities issued by the Swiss federal, cantonal or local governmental entities	0	0	0	0	197	13	0	210
Debt securities issued by foreign governments	821	7	0	828	1,215	21	0	1,236
Corporate debt securities	649	0	0	649	238	0	0	238
Residential mortgage-backed securities ¹	1,430	0	0	1,430	207	0	0	207
Commercial mortgage-backed securities	2	0	0	2	173	0	0	173
Debt securities available-for-sale	2,902	7	0	2,909	2,030	34	0	2,064
Banks, trust and insurance companies ²	-	_	_	_	95	30	0	125
Equity securities available-for-sale ²	_	_	-	_	95	30	0	125
Securities available-for-sale	2,902	7	0	2,909	2,125	64	0	2,189

¹ Relate to the consolidation of RMBS securitization VIEs where the assets are carried at fair value under the fair value option as are the VIEs' liabilities recorded in long-term debt.

Proceeds from sales, realized gains and realized losses from available-for-sale securities

		2018		2017		2016
in	Debt securities	Equity securities 1	Debt securities	Equity securities	Debt securities	Equity securities
Additional information (CHF million)						
Proceeds from sales	255	_	7	7	9	4
Realized gains	8	_	0	0	0	0

¹ As a result of the adoption of ASU 2016-01 equity securities available-for-sale are now recognized in trading assets and no longer in investment securities. Refer to "Note 2 – Recently issued accounting standards" for further information.

Amortized cost, fair value and average yield of debt securities

		Debt securiti available-for-sa	
end of	Amortized cost	Fair value	Average yield (in %)
2018 (CHF million)			
Due within 1 year	844	850	0.72
Due from 1 to 5 years	6	6	4.54
Due from 5 to 10 years	620	621	0.83
Due after 10 years	1,432	1,432	2.45
Total debt securities	2,902	2,909	1.61

² As a result of the adoption of ASU 2016-01, equity securities available-for-sale are now recognized in trading assets and no longer in investment securities. Refer to "Note 2 – Recently issued accounting standards" for further information.

17 Other investments

end of	2018	2017
Other investments (CHF million)		
Equity method investments	2,429	3,027
Equity securities (without a readily determinable fair value) ¹	1,202	1,283
of which at net asset value	526	734
of which at measurement alternative	227	175
of which at fair value	208	161
of which at cost less impairment	241	213
Real estate held-for-investment ²	56	209
Life finance instruments ³	1,137	1,374
Total other investments	4,824	5,893

¹ Includes private equity, hedge funds and restricted stock investments as well as certain investments in non-marketable mutual funds for which the Bank has neither significant influence nor control over the investee.

Equity securities at measurement alternative – impairments and adjustments

in / end of	2018	Cumulative
Impairments and adjustments (CHF million)		
Impairments and downward adjustments	(4)	(7)

→ Refer to "Note 34 – Financial instruments" for further information on such investments.

No impairments were recorded on real estate held-for-investments in 2018, while in 2017 and 2016, impairments of CHF 16 million and CHF 31 million, respectively, were recorded.

Accumulated depreciation related to real estate held-for-investment amounted to CHF 27 million, CHF 136 million and CHF 133 million for 2018, 2017 and 2016, respectively. Prior periods have been corrected.

→ Refer to "Note 18 – Other investments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

² As of the end of 2018 and 2017, real estate held for investment included foreclosed or repossessed real estate of CHF 3 million and CHF 41 million, respectively, all related to residential real estate.

³ Includes life settlement contracts at investment method and SPIA contracts.

18 Loans, allowance for loan losses and credit quality

Loans (CHF million) Mortgages Loans collateralized by securities Consumer Real estate Commercial and industrial loans Financial institutions Governments and public institutions Corporate & institutional Gross loans of which held at mortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net Ioans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Restructured loans Restructured loans Restructured loans Gross impaired loans Gross impaired loans Restructured loans Restructured loans Gross impaired loans Gross impaired loans Restructured loans Restructured loans Gross impaired loans	107,845 42,034 3,905 153,784 26,727 86,165 23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	106,03 42,01 4,24 152,29 26,59 81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (883 283,23 161,64 122,57 284,22 1,04 21 1,25
Loans collateralized by securities Consumer finance Consumer Real estate Commercial and industrial loans Financial institutions Governments and public institutions Corporate & institutional Gross Ioans of which held at amortized cost of which held at fair value Net (unearmed income)/deferred expenses Allowance for loan losses Net Ioans Gross Ioans by location Switzerland Foreign Gross Ioans Impaired Ioans Non-performing Ioans Non-interest-earning Ioans Total non-performing and non-interest-earning Ioans Restructured Ioans Foreis impaired Ioans Foreis impaired Ioans Foreis impaired Ioans Foreing Io	42,034 3,905 153,784 26,727 86,165 23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	42,01 4,24 152,29 26,59 81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (883 283,23 161,64 122,57 284,22
Consumer Real estate Commercial and industrial loans Financial institutions Governments and public institutions Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Gross impaired loans Total other impaired loans Gross impaired loans Gross impaired loans Gross impaired loans Gross impaired loans	3,905 153,784 26,727 86,165 23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	4,24 152,29 26,59 81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (883 283,23 161,64 122,57 284,22
Real estate Commercial and industrial loans Financial institutions Governments and public institutions Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-performing loans Non-interest-earning loans Total one-performing and non-interest-earning loans Restructured loans Gross impaired loans	153,784 26,727 86,165 23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	152,29 26,59 81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (881 283,23 161,64 122,57 284,22
Real estate Commercial and industrial loans Financial institutions Governments and public institutions Corporate & institutional Gross Ioans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net Ioans Gross Ioans by location Switzerland Foreign Gross Ioans Impaired Ioans Non-performing loans Non-performing and non-interest-earning loans Restructured loans Potential problem Ioans Total onn-performing and non-sinterest-earning loans Restructured loans Corporation Ioans Total other impaired Ioans Gross impaired Ioans Gross impaired Ioans Total other impaired Ioans Total other impaired Ioans Gross impaired Ioans	26,727 86,165 23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	26,59 81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (881 283,23 161,64 122,57 284,22
Commercial and industrial loans Financial institutions Governments and public institutions Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Restructured loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Rorss impaired loans Gross impaired loans Restructured loans Foreign Gross impaired loans	86,165 23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (881 283,23 161,64 122,57 284,22
Financial institutions Governments and public institutions Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (uneamed income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	81,79 19,66 3,87 131,92 284,22 268,91 15,30 (106 (881 283,23 161,64 122,57 284,22
Financial institutions Governments and public institutions Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (uneamed income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	23,320 3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	19,66 3,87 131,92 284,22 268,91 15,30 (106 (88 283,23 161,64 122,57 284,22
Governments and public institutions Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Gross impaired loans Gross impaired loans Allowance for loan losses	3,893 140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	3,87 131,92 284,22 268,91 15,30 (106 (883 283,23 161,64 122,57 284,22
Corporate & institutional Gross loans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Allowance for loan losses	140,105 293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	131,92 284,22 268,91 15,30 (106 (883 283,23 161,64 122,57 284,22
Gross loans of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Allowance for loan losses	293,889 279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	284,22 268,91 15,30 (106 (881 283,23 161,64 122,57 284,22
of which held at amortized cost of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Allowance for loan losses	279,016 14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	268,91 15,30 (106 (883 283,23 161,64 122,57 284,22
of which held at fair value Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-performing and non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	14,873 (113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	15,30 (106 (881 283,23 161,64 122,57 284,22 1,04
Net (unearned income)/deferred expenses Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-performing and non-interest-earning loans Total non-performing and non-interest-earning loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Allowance for loan losses	(113) (901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	(106 (883 283,23 161,64 122,57 284,22 1,04
Allowance for loan losses Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Allowance for loan losses	(901) 292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	(883 283,23 161,64 122,57 284,22 1,04
Net loans Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans	292,875 165,184 128,705 293,889 1,203 288 1,491 299 390	283,23 161,64 122,57 284,22 1,04
Gross loans by location Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Gross impaired loans Allowance for loan losses	165,184 128,705 293,889 1,203 288 1,491 299 390	161,64 122,57 284,22 1,04
Switzerland Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	128,705 293,889 1,203 288 1,491 299 390	122,57 284,22 1,04
Foreign Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	128,705 293,889 1,203 288 1,491 299 390	122,57 284,22 1,04
Gross loans Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	1,203 288 1,491 299 390	284,22 1,04 21
Impaired loans Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	1,203 288 1,491 299 390	1,04 21
Non-performing loans Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	288 1,491 299 390	21
Non-interest-earning loans Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	288 1,491 299 390	21
Total non-performing and non-interest-earning loans Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	1,491 299 390	
Restructured loans Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	299 390	1,25
Potential problem loans Total other impaired loans Gross impaired loans Allowance for loan losses	390	
Total other impaired loans Gross impaired loans Allowance for loan losses		29
Gross impaired loans Allowance for loan losses		54
Allowance for loan losses	689	83
	2,180	2,09
2018 2017		201
Corporate Corporate	Corporate	
& & &	Corporate &	
Consumer institutional Total Consumer institutional Total Consumer	r institutional	Tota
Allowance for loan losses (CHF million)		
Balance at beginning of period 220 661 881 216 721 937 21	649	86
Net movements recognized in statements of operations 19 182 201 54 136 190	3 186	24
Gross write-offs (85) (184) (269) (60) (242) (302) (8	(192)	(278
Recoveries 21 37 58 12 41 53	3 53	6
Net write-offs (64) (147) (211) (48) (201) (249) (7	(139)	(212
Provisions for interest 11 19 30 (1) 14 13	8	1
Foreign currency translation impact and other adjustments, net 1 (1) 0 (1) (9) (10)	0 17	1
Balance at end of period 187 714 901 220 661 881 2		93
of which individually evaluated for impairment 146 461 607 179 474 653 17		69
	4 194	23
Gross loans held at amortized cost (CHF million)		
Balance at end of period 153,761 125,255 279,016 152,277 116,640 268,917 145,07		
<u> </u>	115,428	260,49
of which individually evaluated for impairment ¹ 677 1,503 2,180 632 1,465 2,097 66		260,49 2,46

 $^{{\}bf 1}$ Represents gross impaired loans both with and without a specific allowance.

Purchases, reclassifications and sales in 2018 2017 2016 Corporate Corporate Corporate institutional institutional institutional Consumer Total Consumer Total Consumer Total Loans held at amortized cost (CHF million) Purchases 1 0 2,163 0 30 3,405 3,435 2,163 3,381 3,381 Reclassifications from loans held-for-sale ² 0 0 0 1 63 63 125 125 Reclassifications to loans held-for-sale 3 1 2,351 0 7,407 7,407 1,632 2,768 4,400 2,352 Sales 3 2,267 0 7,051 7,051 2,087 1 2,268 72 2,159

Gross loans held at amortized cost by internal counterparty rating

	Investment grade	Non-investme gra		
end of	AAA to BBB	BB to C	D	Total
2018 (CHF million)				
Mortgages	97,404	10,046	395	107,845
Loans collateralized by securities	39,281	2,676	77	42,034
Consumer finance	1,465	2,247	170	3,882
Consumer	138,150	14,969	642	153,761
Real estate	19,461	6,494	110	26,065
Commercial and industrial loans	41,352	37,633	1,256	80,241
Financial institutions	15,540	2,138	86	17,764
Governments and public institutions	1,132	53	0	1,185
Corporate & institutional	77,485	46,318	1,452	125,255
Gross loans held at amortized cost	215,635	61,287	2,094	279,016
Value of collateral ¹	192,617	47,999	1,444	242,060
2017 (CHF million)				
Mortgages	94,553	11,214	272	106,039
Loans collateralized by securities	38,387	3,530	99	42,016
Consumer finance	1,801	2,241	180	4,222
Consumer	134,741	16,985	551	152,277
Real estate	20,278	5,640	85	26,003
Commercial and industrial loans	39,610	35,250	1,287	76,147
Financial institutions	11,223	2,022	46	13,291
Governments and public institutions	1,124	74	1	1,199
Corporate & institutional	72,235	42,986	1,419	116,640
Gross loans held at amortized cost	206,976	59,971	1,970	268,917
Value of collateral ¹	189,092	49,271	1,409	239,772

¹ Includes the value of collateral up to the amount of the outstanding related loans. For mortgages, the value of collateral is determined at the time of granting the loan and thereafter regularly reviewed according to the Bank's risk management policies and directives, with maximum review periods determined by property type, market liquidity and market transparency.

¹ Includes drawdowns under purchased loan commitments.

² Includes loans previously reclassified to held-for-sale that were not sold and were reclassified back to loans held-to-maturity.

³ All loans held at amortized cost which are sold are reclassified to loans held-for-sale on or prior to the date of the sale.

Gross loans held at amortized cost – aging analysis							
	Current					Past due	
end of		Up to 30 days	31-60 days	61-90 days	More than 90 days	Total	Total
2018 (CHF million)							
Mortgages	107,364	155	23	10	293	481	107,845
Loans collateralized by securities	41,936	21	0	0	77	98	42,034
Consumer finance	3,383	286	35	32	146	499	3,882
Consumer	152,683	462	58	42	516	1,078	153,761
Real estate	25,914	63	4	0	84	151	26,065
Commercial and industrial loans	78,919	378	96	82	766	1,322	80,241
Financial institutions	17,593	104	19	3	45	171	17,764
Governments and public institutions	1,172	13	0	0	0	13	1,185
Corporate & institutional	123,598	558	119	85	895	1,657	125,255
Gross loans held at amortized cost	276,281	1,020	177	127	1,411	2,735	279,016
2017 (CHF million)							
Mortgages	105,689	102	27	14	207	350	106,039
Loans collateralized by securities	41,867	37	0	0	112	149	42,016
Consumer finance	3,701	297	39	40	145	521	4,222
Consumer	151,257	436	66	54	464	1,020	152,277
Real estate	25,871	37	12	15	68	132	26,003
Commercial and industrial loans	74,966	429	40	201	511	1,181	76,147
Financial institutions	12,912	333	1	2	43	379	13,291
Governments and public institutions	1,197	1	0	0	1	2	1,199
Corporate & institutional	114,946	800	53	218	623	1,694	116,640
Gross loans held at amortized cost	266,203	1,236	119	272	1,087	2,714	268,917

Gross	impaired	loane h	v category
Gross	imbaired	ioans b	v category

	d s Other impaired lo			oans		
Non- performing	Non- interest- earning	Total	Re- structured	Potential problem	Total	Total
, ,						
304	12	316	34	72	106	422 ¹
62	13	75	0	3	3	78
170	6	176	0	1	1	177
536	31	567	34	76	110	677
80	4	84	0	38	38	122
547	211	758	265	272	537	1,295
40	42	82	0	4	4	86
667	257	924	265	314	579	1,503
1,203	288	1,491	299	390	689	2,180
236	17	253	13	66	79	332 ¹
96	16	112	0	2	2	114
176	9	185	0	1	1	186
508	42	550	13	69	82	632
73	4	77	0	19	19	96
465	121	586	277	458	735	1,321
1	43	44	0	3	3	47
1	0	1	0	0	0	1
540	168	708	277	480	757	1,465
1,048	210	1,258	290	549	839	2,097
	967 1,203 236 96 176 508 73 465 1 1 540	Non-interest earning	Non-performing interestearning Total 304 12 316 62 13 75 170 6 176 536 31 567 80 4 84 547 211 758 40 42 82 667 257 924 1,203 288 1,491 236 17 253 96 16 112 176 9 185 508 42 550 73 4 77 465 121 586 1 43 44 1 0 1 540 168 708	Non-performing Non-interest earning Non-performing Non-interest-earning Non-inter	Non-interest earning Toans	Non-interest earning Toals

¹ As of December 31, 2018 and 2017, CHF 123 million and CHF 90 million, respectively, were related to consumer mortgages secured by residential real estate for which formal foreclosure proceedings according to local requirements of the applicable jurisdiction were in process.

As of December 31, 2018 and 2017, the Bank did not have any material commitments to lend additional funds to debtors whose loan terms had been modified in troubled debt restructurings.

Gross impaired loan details						
			2018			2017
end of	Recorded investment	Unpaid principal balance	Associated specific allowance	Recorded investment	Unpaid principal balance	Associated specific allowance
CHF million						
Mortgages	278	262	21	254	239	36
Loans collateralized by securities	77	63	35	111	97	49
Consumer finance	174	154	90	180	160	94
Consumer	529	479	146	545	496	179
Real estate	82	73	10	86	79	11
Commercial and industrial loans	761	730	400	984	947	426
Financial institutions	86	84	51	47	46	37
Governments and public institutions	0	0	0	1	1	0
Corporate & institutional	929	887	461	1,118	1,073	474
Gross impaired loans with a specific allowance	1,458	1,366	607	1,663	1,569	653
Mortgages	144	144	_	78	78	_
Loans collateralized by securities	1	1	-	3	3	-
Consumer finance	3	3	_	6	6	-
Consumer	148	148	_	87	87	_
Real estate	40	40	_	10	10	_
Commercial and industrial loans	534	534	-	337	337	_
Corporate & institutional	574	574	_	347	347	_
Gross impaired loans without specific allowance	722	722	_	434	434	_
Gross impaired loans	2,180	2,088	607	2,097	2,003	653
of which consumer	677	627	146	632	583	179
of which corporate & institutional	1,503	1,461	461	1,465	1,420	474

Gross impaired loan details (continued	d)								
			2018			2017			2016
in	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)
CHF million									
Mortgages	261	2	1	229	2	1	195	2	1
Loans collateralized by securities	92	1	1	116	1	1	153	1	1
Consumer finance	176	2	2	167	5	5	205	1	1
Consumer	529	5	4	512	8	7	553	4	3
Real estate	90	0	0	78	1	0	72	1	0
Commercial and industrial loans	905	14	5	1,151	17	5	1,029	10	4
Financial institutions	58	1	0	76	1	1	154	1	0
Governments and public institutions	0	0	0	5	0	0	5	0	0
Corporate & institutional	1,053	15	5	1,310	19	6	1,260	12	4
Gross impaired loans with a specific allowance	1,582	20	9	1,822	27	13	1,813	16	7
Mortgages	91	3	0	83	3	0	83	3	0
Loans collateralized by securities	1	0	0	7	0	0	24	0	0
Consumer finance	3	0	0	3	0	0	11	0	0
Consumer	95	3	0	93	3	0	118	3	0
Real estate	14	1	0	27	1	0	31	1	0
Commercial and industrial loans	292	16	1	271	11	1	307	7	1
Financial institutions	0	0	0	0	0	0	5	0	0
Governments and public institutions	0	0	0	0	0	0	5	0	0
Corporate & institutional	306	17	1	298	12	1	348	8	1
Gross impaired loans without specific allowance	⇒ 401	20	1	391	15	1	466	11	1
Gross impaired loans	1,983	40	10	2,213	42	14	2,279	27	8
of which consumer	624	8	4	605	11	7	671	7	3

		2018			2017			20		
in	Number of contracts	Recorded investment – pre- modification	Recorded investment – post- modification	Number of contracts	pre-	Recorded investment – post- modification	Number of contracts	Recorded investment – pre- modification	Recorded investment – post- modification	
CHF million, except where indicated										
Mortgages	5	29	29	0	0	0	0	0	0	
Commercial and industrial loans	13	182	160	15	123	119	16	201	201	
Total	18	211	189	15	123	119	16	201	201	

6

1,608

1,359

Restructured loans held at amortized cost that defaulted within 12 months from restructuring										
	2018		2018			2017		2016		
in	Number of contracts	Recorded investment	Number of contracts	Recorded investment	Number of contracts	Recorded investment				
CHF million, except where indicated										
Mortgages	1	8	0	0	0	0				
Commercial and industrial loans	8	76	1	48	0	0				
Total	9	84	1	48	0	0				

In 2018, the loan modifications of the Bank included extended loan repayment terms, including suspensions of loan amortizations, deferral of lease installments or pay-as-you-earn

arrangements, the waiver of claims, interest rate concessions and the subordination of a loan.

1,608

20

of which corporate & institutional

[→] Refer to "Note 19 – Loans, allowance for loan losses and credit quality" in VI – Consolidated financial statements – Credit Suisse Group for further information.

19 Premises and equipment

end of	2018	2017
Premises and equipment (CHF million)		
Buildings and improvements	1,595	1,624
Land	347	346
Leasehold improvements	1,752	1,751
Software	5,715	5,583
Equipment	1,136	1,226
Premises and equipment	10,545	10,530
Accumulated depreciation	(6,015)	(6,085)
Total premises and equipment, net	4,530	4,445

in	2018	2017	2016
Depreciation and impairment (CHF r	nillion)		
Depreciation	745	770	882
Impairment	8	33	25

20 Goodwill

	Swiss Universal	Wealth	Asia	Global	Investment Banking & Capital	Strategic Resolution	
2018	Bank	Management	Pacific	Markets	Markets	Unit	Bank
Gross amount of goodwill (CHF million)							
Balance at beginning of period	592	1,531	2,044	2,837	911	12	7,927
Foreign currency translation impact	2	8	9	1	5	0	25
Other	3	(8)	0	0	0	0	(5)
Balance at end of period	597	1,531	2,053	2,838	916	12	7,947
Accumulated impairment (CHF million)							
Balance at beginning of period	0	0	772	2,719	388	12	3,891
Balance at end of period	0	0	772	2,719	388	12	3,891
Net book value (CHF million)							
Net book value	597	1,531	1,281	119	528	0	4,056
2017							
Gross amount of goodwill (CHF million)							
Balance at beginning of period	605	1,598	2,090	2,842	933	12	8,080
Foreign currency translation impact	(13)	(54)	(46)	(5)	(22)	0	(140)
Other	0	(13)	0	0	0	0	(13)
Balance at end of period	592	1,531	2,044	2,837	911	12	7,927
Accumulated impairment (CHF million)							
Balance at beginning of period	0	0	772	2,719	388	12	3,891
Balance at end of period	0	0	772	2,719	388	12	3,891
Net book value (CHF million)							
Net book value	592	1,531	1,272	118	523	0	4,036

[→] Refer to "Note 21 – Goodwill" in VI – Consolidated financial statements – Credit Suisse Group for further information.

¹ Prior period has been corrected.

21 Other intangible assets

		2018				
end of	Gross carrying amount	Accumu- lated amorti- zation	Net carrying amount	Gross carrying amount	Accumu- lated amorti- zation	Net carrying amount
Other intangible assets (CHF million)						
Trade names/trademarks	27	(26)	1	27	(26)	1
Client relationships	43	(20)	23	47	(18)	29
Other	(2)	2	0	5	(3)	2
Total amortizing other intangible assets	68	(44)	24	79	(47)	32
Non-amortizing other intangible assets	195	_	195	191	_	191
of which mortgage servicing rights, at fair value	163	_	163	158		158
Total other intangible assets	263	(44)	219	270	(47)	223

Additional information							
in	2018	2017	2016				
Aggregate amortization and impa	irment (CHF million	1)					
Aggregate amortization	8	7	8				
Impairment	1	2	0				

Estimated amortization	
Estimated amortization (CHF million)	
2019	4
2020	3
2021	2
2022	2
2023	2

22 Other assets and other liabilities

end of	2018	2017
Other assets (CHF million)		
Cash collateral on derivative instruments	7,057	5,142
Cash collateral on non-derivative transactions	465	490
Derivative instruments used for hedging	33	50
Assets held-for-sale	6,744	8,300
of which loans 1	6,630	8,130
of which real estate ²	54	141
of which long-lived assets	60	29
Assets held for separate accounts	125	190
Interest and fees receivable	5,506	4,819
Deferred tax assets	4,887	5,457
Prepaid expenses	560	330
Failed purchases	1,283	1,327
Defined benefit pension and post-retirement plan assets	1,001	1,058
Other	4,482	3,793
Other assets	32,143	30,956

1	Included as of the end of 2018 and 2017 were CHF 687 million and CHF 534 million,
	respectively, in restricted loans, which represented collateral on secured borrowings.

² As of the end of 2018 and 2017, real estate held-for-sale included foreclosed or repossessed real estate of CHF 13 million and CHF 8 million, respectively, of which CHF 10 million and CHF 5 million, respectively, were related to residential real estate.

end of	2018	2017
Other liabilities (CHF million)		
Cash collateral on derivative instruments	6,903	8,644
Cash collateral on non-derivative transactions	514	473
Derivative instruments used for hedging	8	99
Provisions	920	998
of which off-balance sheet risk	151	106
Restructuring liabilities	342	301
Liabilities held for separate accounts	125	190
Interest and fees payable	5,521	5,804
Current tax liabilities	907	687
Deferred tax liabilities	268	152
Failed sales	2,187	720
Defined benefit pension and post-retirement plan liabilities	518	541
Other	12,114	13,074
Other liabilities	30,327	31,683

23 Deposits

				2017		
end of	Switzer- land	Foreign	Total	Switzer- land	Foreign	Total
Deposits (CHF million)						
Non-interest-bearing demand deposits	2,713	1,981	4,694	2,594	2,058	4,652
Interest-bearing demand deposits	126,416	28,010	154,426	125,685	32,965	158,650
Savings deposits	63,924	48	63,972	64,068	18	64,086
Time deposits	32,347	125,044	157,391 ¹	33,051	117,275	150,326 ¹
Total deposits	225,400	155,083	380,483 ²	225,398	152,316	377,714 ²
of which due to banks	-	-	15,220	-	-	15,411
of which customer deposits			365,263		_	362,303

The designation of deposits in Switzerland versus foreign deposits is based upon the location of the office where the deposit is recorded.

24 Long-term debt

end of	2018	2017
Long-term debt (CHF million)		
Senior	136,445	148,568
Subordinated	15,224	22,611
Non-recourse liabilities from consolidated VIEs	1,764	863
Long-term debt	153,433	172,042
of which reported at fair value	63,027	62,622
of which structured notes	48,064	51,465

Total structured notes	48,064	51,465
Other	340	257
Credit	3,898	4,678
Fixed income	13,128	14,471
Equity	30,698	32,059
Structured notes by product (CHF million)		
end of	2018	2017

Long-term debt by maturities							
end of	2019	2020	2021	2022	2023	Thereafter	Total
Long-term debt (CHF million)							
Senior debt							
Fixed rate	15,798	9,359	7,759	11,321	6,041	29,899	80,177
Variable rate	10,001	9,953	8,142	5,690	3,605	18,877	56,268
Interest rates (range in %) 1	0.0–8.8	0.1–22.5	0.1–6.7	0.1–8.2	0.1-4.2	0.2-7.1	
Subordinated debt							
Fixed rate	0	1,797	19	1,552	5,781	5,858	15,007
Variable rate	211	0	0	0	6	0	217
Interest rates (range in %) 1	2.7	3.3–7.0	3.3	7.1–7.5	3.9–8.0	3.5–8.0	
Non-recourse liabilities from consolidated VIEs							
Fixed rate	346	235	23	0	0	0	604
Variable rate	114	2	4	6 ²	21 ²	1,013	1,160
Interest rates (range in %) 1	2.9–7.2	3.8	9.3–10.3			1.2–10.7	
Total long-term debt	26,470	21,346	15,947	18,569	15,454	55,647	153,433
of which structured notes	8,268	9,260	5,779	3,787	2,726	18,244	48,064

The maturity of perpetual debt is based on the earliest callable date. The maturity of all other debt is based on contractual maturity and includes certain structured notes that have mandatory early redemption features based on stipulated movements in markets or the occurrence of a market event. Within this population there are approximately CHF 0.5 billion of such notes with a contractual maturity of greater than one year that have an observable likelihood of redemption occurring within one year based on a modelling assessment.

¹ Included CHF 157,252 million and CHF 150,203 million as of December 31, 2018 and 2017, respectively, of the Swiss franc equivalent of individual time deposits greater than USD 100,000 in Switzerland and foreign offices.

² Not included as of December 31, 2018 and 2017 were CHF 137 million and CHF 135 million, respectively, of overdrawn deposits reclassified as loans.

¹ Excludes structured notes for which fair value has been elected as the related coupons are dependent upon the embedded derivatives and prevailing market conditions at the time each coupon is paid

 $[\]boldsymbol{2}$ Reflects equity linked notes, where the payout is not fixed.

[→] Refer to "Note 25 – Long-term debt" in VI – Consolidated financial statements – Credit Suisse Group for further information.

25 Accumulated other comprehensive income

Balance at end of period	(16)	(12,269)	61	(402)	2	(618)	(13,242)	
Total increase/(decrease)	(22)	481	1	210	0	(618)	52	
Cumulative effect of accounting changes, net of tax	0	0	0	0	0	464	464	
Reclassification adjustments, included in net income/(loss)	(16)	72	0	79	0	0	135	
Increase/(decrease)	(6)	409	1	131	0	(1,082)	(547)	
Balance at beginning of period	6	(12,750)	60	(612)	2	_	(13,294)	
2016 (CHF million)								
Balance at end of period	(51)	(13,248)	48	(381)	2	(2,302)	(15,932)	
Total increase/(decrease)	(35)	(979)	(13)	21	0	(1,684)	(2,690)	
Reclassification adjustments, included in net income/(loss)	26	30	0	61	0	32	149	
Increase/(decrease)	(61)	(1,009)	(13)	(40)	0	(1,716)	(2,839)	
Balance at beginning of period	(16)	(12,269)	61	(402)	2	(618)	(13,242)	
2017 (CHF million)								
Balance at end of period	(58)	(13,573)	9	(350)	(8)	(860)	(14,840)	
Total increase/(decrease)	(7)	(325)	(39)	31	(10)	1,442	1,092	
Cumulative effect of accounting changes, net of tax	0	0	(21)	0	0	0	(21)	
Reclassification adjustments, included in net income/(loss)	108	19	(7)	49	0	48	217	
Increase/(decrease)	(115)	(344)	(11)	(18)	(10)	1,394	896	
2018 (CHF million) Balance at beginning of period	(51)	(13,248)	48	(381)	2	(2,302)	(15,932)	
	Gains/ (losses) on cash flow hedges	Cumulative translation adjustments	Unrealized gains/ (losses) on securities	Actuarial gains/ (losses)	Net prior service credit/ (cost)	(losses) on liabilities relating to credit risk	AOCI	
			/ Upro	/ Uproplized			Gains/	

[→] Refer to "Note 27 – Tax" and "Note 30 – Pension and other post-retirement benefits" for income tax expense/(benefit) on the movements of accumulated other comprehensive income/(loss).

Details of significant reclassification adjustments			
in	2018	2017	2016
Reclassification adjustments, included in net income/(loss) (CHF million)		
Cumulative translation adjustments			
Reclassification adjustments ¹	19	30	72
Actuarial gains/(losses)			
Amortization of recognized actuarial losses ²	55	68	123
Tax expense/(benefit)	(6)	(7)	(44)
Net of tax	49	61	79

¹ Includes net releases of CHF 21 million on the liquidation of Credit Suisse Securities (Johannesburg) Proprietary Limited in 2018 and net releases of CHF 17 million on the liquidation of Credit Suisse Principal Investments Limited and AJP Cayman Ltd. in 2016. In addition, it includes net releases of CHF 23 million on the sale of Credit Suisse (Monaco) S.A.M. in 2017 and net releases of CHF 59 million on the sale of Credit Suisse (Gibraltar) Limited in 2016. These were reclassified from cumulative translation adjustments and included in net income in other revenues.

² These components are included in the computation of total benefit costs. Refer to "Note 30 – Pension and other post-retirement benefits" for further information.

26 Offsetting of financial assets and financial liabilities

→ Refer to "Note 27 – Offsetting of financial assets and financial liabilities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Offsetting of derivatives				
		2018		2017
end of	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Gross derivatives subject to enforceable master netting agreements (CHF billion)				
OTC-cleared	5.5	4.8	2.5	1.8
OTC	63.4	60.7	83.3	79.0
Exchange-traded	0.2	0.3	0.1	0.2
Interest rate products	69.1	65.8	85.9	81.0
OTC-cleared	0.1	0.2	0.2	0.2
OTC	26.9	31.2	29.1	34.6
Foreign exchange products	27.0	31.4	29.3	34.8
OTC	10.2	10.3	11.7	12.0
Exchange-traded	11.8	14.2	9.2	9.8
Equity/index-related products	22.0	24.5	20.9	21.8
OTC-cleared	1.5	1.6	3.6	3.8
OTC	3.8	4.9	3.9	4.7
Credit derivatives	5.3	6.5	7.5	8.5
OTC	1.3	0.5	1.4	0.9
Other products ¹	1.3	0.5	1.4	0.9
OTC-cleared	7.1	6.6	6.3	5.8
OTC	105.6	107.6	129.4	131.2
Exchange-traded	12.0	14.5	9.3	10.0
Total gross derivatives subject to enforceable master netting agreements	124.7	128.7	145.0	147.0
Offsetting (CHF billion)				
OTC-cleared	(6.0)	(5.8)	(5.7)	(5.4)
OTC	(92.5)	(99.1)	(114.5)	(122.4)
Exchange-traded	(11.6)	(12.5)	(8.6)	(9.6)
Offsetting	(110.1)	(117.4)	(128.8)	(137.4)
of which counterparty netting	(96.9)	(96.9)	(113.8)	(113.8)
of which cash collateral netting	(13.2)	(20.5)	(15.0)	(23.6)
Net derivatives presented in the consolidated balance sheets (CHF billion)				
OTC-cleared	1.1	0.8	0.6	0.4
OTC	13.1	8.5	14.9	8.8
Exchange-traded	0.4	2.0	0.7	0.4
Total net derivatives subject to enforceable master netting agreements	14.6	11.3	16.2	9.6
Total derivatives not subject to enforceable master netting agreements ²	3.8	3.9	3.7	5.2
Total net derivatives presented in the consolidated balance sheets	18.4	15.2	19.9	14.8
of which recorded in trading assets and trading liabilities	18.4	15.2	19.9	14.7
of which recorded in other assets and other liabilities	0.0	0.0	0.0	0.1

¹ Primarily precious metals, commodity and energy products.

² Represents derivatives where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

Offsetting of securities purchased under resale agreements and securities borrowing transactions

end of			2018			2017
	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities purchased under resale agreements and securities borrowing transactions (CHF billion)						
Securities purchased under resale agreements	86.6	(20.9)	65.7	89.4	(28.8)	60.6
Securities borrowing transactions	12.6	(2.2)	10.4	18.7	(5.0)	13.7
Total subject to enforceable master netting agreements	99.2	(23.1)	76.1	108.1	(33.8)	74.3
Total not subject to enforceable master netting agreements ¹	41.0	-	41.0	41.0	-	41.0
Total	140.2	(23.1)	117.1 ²	149.1	(33.8)	115.3

¹ Represents securities purchased under resale agreements and securities borrowing transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

Offsetting of securities sold under repurchase agreements and securities lending transactions

		2018			2017
Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
42.3	(22.5)	19.8	49.4	(31.5)	17.9
4.2	(0.6)	3.6	7.1	(2.3)	4.8
39.4	0.0	39.4	37.0	0.0	37.0
85.9	(23.1)	62.8	93.5	(33.8)	59.7
3.5	-	3.5	4.9	-	4.9
89.4	(23.1)	66.3	98.4	(33.8)	64.6
47.7	(23.1)	24.6 ²	60.3	(33.8)	26.5 ²
41.7	0.0	41.7	38.1	0.0	38.1
	42.3 4.2 39.4 85.9 3.5 89.4	42.3 (22.5) 4.2 (0.6) 39.4 0.0 85.9 (23.1) 3.5 – 89.4 (23.1) 47.7 (23.1)	Gross Offsetting book value 42.3 (22.5) 19.8 4.2 (0.6) 3.6 39.4 0.0 39.4 85.9 (23.1) 62.8 3.5 - 3.5 89.4 (23.1) 66.3 47.7 (23.1) 24.6²	Gross Offsetting book value Gross 42.3 (22.5) 19.8 49.4 4.2 (0.6) 3.6 7.1 39.4 0.0 39.4 37.0 85.9 (23.1) 62.8 93.5 3.5 - 3.5 4.9 89.4 (23.1) 66.3 98.4 47.7 (23.1) 24.6 ² 60.3	Gross Offsetting book value Gross Offsetting 42.3 (22.5) 19.8 49.4 (31.5) 4.2 (0.6) 3.6 7.1 (2.3) 39.4 0.0 39.4 37.0 0.0 85.9 (23.1) 62.8 93.5 (33.8) 3.5 - 3.5 4.9 - 89.4 (23.1) 66.3 98.4 (33.8) 47.7 (23.1) 24.6² 60.3 (33.8)

¹ Represents securities sold under repurchase agreements and securities lending transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

Amounts not offset in the consolidated balance sheets

				2018				2017
end of	Net	Financial instruments 1	Cash collateral received/ pledged ¹	Net exposure	Net	Financial instruments 1	Cash collateral received/ pledged ¹	Net exposure
Financial assets subject to enforceable master netting agreements (CHF billion)								
Derivatives	14.6	4.5	0.1	10.0	16.2	5.2	0.0	11.0
Securities purchased under resale agreements	65.7	65.7	0.0	0.0	60.6	60.6	0.0	0.0
Securities borrowing transactions	10.4	10.0	0.0	0.4	13.7	13.2	0.0	0.5
Total financial assets subject to enforceable master netting agreements	90.7	80.2	0.1	10.4	90.5	79.0	0.0	11.5
Financial liabilities subject to enforceable master netting agreements (CHF billion)								
Derivatives	11.3	1.4	0.0	9.9	9.6	2.1	0.0	7.5
Securities sold under repurchase agreements	19.8	19.7	0.1	0.0	17.9	17.9	0.0	0.0
Securities lending transactions	3.6	3.2	0.0	0.4	4.8	4.4	0.0	0.4
Obligation to return securities received as collateral, at fair value	39.4	34.3	0.0	5.1	37.0	32.7	0.0	4.3
Total financial liabilities subject to enforceable master netting agreements	74.1	58.6	0.1	15.4	69.3	57.1	0.0	12.2

¹ The total amount reported in financial instruments (recognized financial assets and financial liabilities and non-cash financial collateral) and cash collateral is limited to the amount of the related instruments presented in the consolidated balance sheets and therefore any over-collateralization of these positions is not included.

² CHF 81,818 million and CHF 77,498 million of the total net amount as of the end of 2018 and 2017, respectively, are reported at fair value.

² CHF 14,828 million and CHF 15,262 million of the total net amount as of the end of 2018 and 2017, respectively, are reported at fair value.

27 Tax

Details of current and deferred taxes

Switzerland 126 76 1 Foreign 416 420 4 496 6 6 580 6 585 (16 6 6 580 6 580 6 580 (16 68 6 580 6 68 680 6	in	2018	2017	2016	
Foreign 416 420 4 Current income tax expense 542 496 6 265 (16 265 (16 265 (16 265 (16 265 (16 265 (16 265 (16 266 265 (16 265 (16 266 265 (16 266 265 (16 266 265 (16 266 265 (16 266 265 (16 266 265 (16 266 265 (16 260 <td>Current and deferred taxes (CHF million)</td> <td></td> <td></td> <td></td>	Current and deferred taxes (CHF million)				
Current income tax expense 542 496 6 Switzerland 266 285 (16 Deferred income tax expense/(benefit) 592 2,285 (23 Income tax expense/(benefit) 592 2,285 (23 Income tax expense/(benefit) reported in shareholder's equity related to: <td (benefit)="" 22<="" at="" computed="" of="" rate="" rowspanse="" statutory="" tax="" td="" the=""><td>Switzerland</td><td>126</td><td>76</td><td>135</td></td>	<td>Switzerland</td> <td>126</td> <td>76</td> <td>135</td>	Switzerland	126	76	135
Switzerland 266 285 (166 Foreign 326 2,000 (6 Deferred income tax expense/(benefit) 592 2,285 23 Income tax expense 1,134 2,781 4 Income tax expense/(benefit) reported in shareholder's equity related to: (28) (24) (24) Gains/(losse) on cash flow hedges (28) (24) (27) (27) 1 Cumulative translation adjustment (7) 1 1 4 <td< td=""><td>Foreign</td><td>416</td><td>420</td><td>499</td></td<>	Foreign	416	420	499	
Prometian Section Se	Current income tax expense	542	496	634	
Deferred income tax expense/(benefit) 592 2,285 (23) (23) (24) (27) (2	Switzerland	266	285	(167)	
1,134 2,781 4	Foreign	326	2,000	(67)	
Common tax expense/(benefit) reported in shareholder's equity related to: Gains/(losses) on cash flow hedges	Deferred income tax expense/(benefit)	592	2,285	(234)	
Gains/(losses) on cash flow hedges (28) (24) Cumulative translation adjustment (7) 1 Unrealized gains/(losses) on securities (5) 1 Actuarial gains/(losses) 7 (7) Share-based compensation and treasury shares 0 0 1 Reconciliation of taxes computed at the Swiss statutory rate in 2018 2017 20 Income/(loss) before taxes (CHF million) Switzerland 1,927 1,648 1,9 Foreign 929 (95) (4,44) Income/(loss) before taxes 2,856 1,553 2,886 Reconciliation of taxes computed at the Swiss statutory rate (CHF million) 8 456 1,553 2,486 Increase/(decrease) in income taxe spense/(benefit) computed at the statutory tax rate of 22% 628 342 054 Increase/(decrease) in income taxes resulting from 89 99 99 05 Foreign tax rate differential 89 99 99 05 Non deductible amortization of other intangible assets and goodwill impairment<	Income tax expense	1,134	2,781	400	
Cumulative translation adjustment (7) 1 Unrealized gains/(losses) on securities (5) 1 Actuarial gains/(losses) 7 (7) Share-based compensation and treasury shares 0 0 1 Reconciliation of taxes computed at the Swiss statutory rate 2018 2017 20 Income/(loss) before taxes (CHF million) 3 2017 20 Income/(loss) before taxes 1,927 1,648 1,9 Foreign 929 195 4,44 Income/(loss) before taxes 2,856 1,553 2,48 Reconciliation of taxes computed at the Swiss statutory rate (CHF million) 8 1,553 2,48 Reconciliation of taxes computed at the statutory tax rate of 22% 628 342 5 Reconciliation of tax expense/(benefit) computed at the statutory tax rate of 22% 628 342 5 Reconciliation of tax expense/(benefit) computed at the statutory tax rate of 22% 89 9(92) 65 Non-deductible amortization of other intangible assets and goodwill impairment 3 0 6 Foreign tax rate dif	Income tax expense/(benefit) reported in shareholder's equity related to:				
Unrealized gains/(losses) on securities (5) 1 Actuarial gains/(losses) (7 (7) 5 5 5 6 6 6 6 6 6 6	Gains/(losses) on cash flow hedges	(28)	(24)	(6)	
Actuarial gains/(losses) 7 (7) Share-based compensation and treasury shares 0 0 1 Reconciliation of taxes computed at the Swiss statutory rate in 2018 2017 20 Income/(loss) before taxes (CHF million) 2018 2017 20 Switzerland 1,927 1,648 1,9 Foreign 929 (95) (4,44 Income/(loss) before taxes 1,553 (2,48) Reconciliation of taxes computed at the Swiss statutory rate (CHF million) 2,856 1,553 (2,48) Income tax expense/(benefit) computed at the statutory tax rate of 22% 628 342 (54) Increase/(decrease) in income taxes resulting from 628 342 (54) Foreign tax rate differential 89 (92) (55) Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 Lower taxed income (187) (272) (21) (Income) (inc	Cumulative translation adjustment	(7)	1	(4)	
Reconciliation of taxes computed at the Swiss statutory rate in 2018 2017 2018 2017 2018 2018 2017 2018 2019 2018 2019 2019 2018 2019 20	Unrealized gains/(losses) on securities	(5)	1	1	
Reconciliation of taxes computed at the Swiss statutory rate 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,927 1,648 1,928	Actuarial gains/(losses)	7	(7)	87	
Income/(loss) before taxes (CHF million) 2018 2017 2018 Switzerland 1,927 1,648 1,9 Foreign 929 (95) (4,44) Income/(loss) before taxes 2,856 1,553 2,48 Reconciliation of taxes computed at the Swiss statutory rate (CHF million) 8 342 (54) Increase/(decrease) in income taxes resulting from 89 (92) (55) Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 1 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Share-based compensation and treasury shares	0	0	106	
Switzerland 1,927 1,648 1,9 Foreign 929 (95) (4,44 Income/(loss) before taxes 2,856 1,553 (2,48 Reconciliation of taxes computed at the Swiss statutory rate (CHF million) Income tax expense/(benefit) computed at the statutory tax rate of 22% 628 342 (54 Increase/(decrease) in income taxes resulting from 89 (92) (55 Foreign tax rate differential 89 (92) (55 Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Income/(loss) hefore taxes (CHF million)				
Promertian 929 (95) (4,44 Income/(loss) before taxes 2,856 1,553 (2,48 Reconciliation of taxes computed at the Swiss statutory rate (CHF million) Income tax expense/(benefit) computed at the statutory tax rate of 22% 628 342 (54 Increase/(decrease) in income taxes resulting from 89 (92) (58 Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (18 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Income/(loss) before taxes (CHF million)				
Income/(loss) before taxes 2,856 1,553 (2,48) Reconciliation of taxes computed at the Swiss statutory rate (CHF million) 828 342 (54) Increase/(decrease) in income taxes resulting from 89 (92) (55) Foreign tax rate differential 89 (92) (55) Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 628 Lower taxed income 5 0 628 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Switzerland	1,927	1,648	1,955	
Reconciliation of taxes computed at the Swiss statutory rate (CHF million) Income tax expense/(benefit) computed at the statutory tax rate of 22% 628 342 (54 Increase/(decrease) in income taxes resulting from 89 (92) (58 Foreign tax rate differential 89 (92) (58 Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Foreign	929	(95)		
Income tax expense/(benefit) computed at the statutory tax rate of 22% 628 342 (54 Increase/(decrease) in income taxes resulting from 89 (92) (55 Foreign tax rate differential 89 (92) (55 Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 628 10 628 Lower taxed income 10 7 (10	Income/(loss) before taxes	2,856		(4,444)	
Increase/(decrease) in income taxes resulting from 89 (92) (58	Reconciliation of taxes computed at the Swiss statutory rate (CHF million)		1,553	(4,444) (2,489)	
Foreign tax rate differential 89 (92) (58) Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Income tax expense/(benefit) computed at the statutory tax rate of 22%		1,553		
Non-deductible amortization of other intangible assets and goodwill impairment 3 0 Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Increase/(decrease) in income taxes resulting from	628		(2,489)	
Other non-deductible expenses 455 354 1,5 Additional taxable income 5 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88		628		(2,489)	
Additional taxable income 5 0 Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Foreign tax rate differential		342	(2,489) (548)	
Lower taxed income (187) (272) (21 (Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88		89	342	(2,489) (548)	
(Income)/loss taxable to noncontrolling interests 10 7 (1 Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Non-deductible amortization of other intangible assets and goodwill impairment	89	342 (92)	(2,489) (548) (559)	
Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Non-deductible amortization of other intangible assets and goodwill impairment Other non-deductible expenses	89 3 455	342 (92) 0 354	(548) (559) 1,533	
Changes in tax law and rates (2) 2,095 1 Changes in deferred tax valuation allowance (115) 88	Non-deductible amortization of other intangible assets and goodwill impairment Other non-deductible expenses Additional taxable income	89 3 455 5	342 (92) 0 354	(5489) (548) (559) 1 1,533	
	Non-deductible amortization of other intangible assets and goodwill impairment Other non-deductible expenses Additional taxable income Lower taxed income	89 3 455 5 (187)	342 (92) 0 354 0 (272)	(548) (548) (559) 1 1,533 87 (216)	
Change in recognition of outside basis difference (32) (12) 2	Non-deductible amortization of other intangible assets and goodwill impairment Other non-deductible expenses Additional taxable income Lower taxed income (Income)/loss taxable to noncontrolling interests	89 3 455 5 (187)	342 (92) 0 354 0 (272)	(548) (548) (559) 1 1,533 87 (216) (10)	
	Non-deductible amortization of other intangible assets and goodwill impairment Other non-deductible expenses Additional taxable income Lower taxed income (Income)/loss taxable to noncontrolling interests Changes in tax law and rates	89 3 455 5 (187) 10 (2)	342 (92) 0 354 0 (272) 7 2,095		

2018

Other

Income tax expense

Foreign tax rate differential of CHF 89 million reflected a foreign tax expense mainly driven by profits made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits incurred in lower tax jurisdictions, mainly in Singapore. The foreign tax rate expense of CHF 742 million comprised not only the foreign tax expense based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Tax deductible impairments of Swiss subsidiary investments

(Windfall tax benefits)/shortfall tax charges on share-based compensation

Other non-deductible expenses of CHF 455 million included the impact of CHF 325 million relating to non-deductible interest expenses (including a contingency accrual of CHF 92 million), CHF 49 million relating to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 15 million relating to non-deductible fines, and other various smaller non-deductible expenses.

(65)

10

335

1,134

88

91

92

2,781

(68)

(252)

400

Lower taxed income of CHF 187 million included a tax benefit of CHF 66 million related to non-taxable dividend income, CHF 48 million related to non-taxable life insurance income, CHF 33 million related to concessionary and lower taxed income, CHF 23 million related to exempt income, and various smaller items.

Changes in deferred tax valuation allowances of CHF 115 million included a tax benefit from the release of valuation allowances of CHF 191 million, mainly in respect of two of the Bank's operating entities in the UK. Also included was the net impact of the increase in valuation allowances on deferred tax assets of CHF 76 million, mainly in respect of one of the Bank's operating entities in Switzerland.

Other of CHF 335 million included CHF 202 million relating to the tax impact of transitional adjustments arising on first adoption of IFRS 9 for own credit movements, CHF 65 million relating to the US Base Erosion and Anti-abuse Tax (BEAT), CHF 56 million relating to the net re-assessment of deferred tax balances in respect of one of the Bank's operating entities in Switzerland, CHF 26 million relating to the increase of tax contingency accruals, and other smaller balances. This was partially offset by prior year adjustments of CHF 76 million.

2017

Foreign tax rate differential of CHF 92 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to losses incurred in lower tax jurisdictions, mainly in Guernsey. The foreign tax rate expense of CHF 2,420 million comprised not only the foreign tax benefit based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 354 million included the impact of CHF 217 million relating to non-deductible interest expenses (including a contingency accrual of CHF 155 million), CHF 57 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 27 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 10 million related to non-deductible foreign exchange losses, and other various smaller non-deductible expenses of CHF 43 million.

Lower taxed income of CHF 272 million included a tax benefit of CHF 86 million related to non-taxable life insurance income, CHF 78 million related to non-taxable dividend income, CHF 31 million in respect of income taxed at rates lower than the statutory tax rate, CHF 25 million related to exempt income, and various smaller items.

Changes in tax law and rates of CHF 2,095 million mainly reflected the impact of the US tax reform enacted on December 22, 2017 which resulted in a reduction of the federal corporate income tax rate from 35% to 21%, effective as of January 1, 2018. The US tax reform required a re-assessment of the deferred tax assets.

Changes in deferred tax valuation allowances of CHF 88 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 285 million, mainly in respect of two of the Bank's operating entities in the UK. Also included was a tax benefit from the release of valuation allowances of CHF 197 million, mainly in respect of two of the Bank's operating entities, one in the UK and one in Switzerland.

Other of CHF 92 million included a tax expense of CHF 231 million relating to the net re-assessment of deferred tax balances in respect of two of the Bank's operating entities in Switzerland reflecting the establishment of Credit Suisse Asset Management & Investor Services (Schweiz) Holding AG, the impact of adverse earnings mix of the current year and changes in forecasted future profitability, CHF 26 million relating to the increase of tax contingency accruals and CHF 17 million from prior year adjustments, partially offset by CHF 85 million relating to tax deductibility of previously taken litigation accruals and CHF 49 million from a favorable court decision. The remaining balance included various smaller items.

2016

Foreign tax rate differential of CHF 559 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits earned in lower tax jurisdictions, mainly the Bahamas. The foreign tax rate expense of CHF 432 million was not only impacted by the foreign tax benefit based on statutory tax rates but also by tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 1,533 million included the impact of CHF 983 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 420 million relating to non-deductible interest expenses, CHF 52 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 31 million related to non-deductible foreign exchange losses, CHF 25 million related to onerous lease provisions, and other various smaller non-deductible expenses of CHF 22 million.

Lower taxed income of CHF 216 million included a tax benefit of CHF 71 million related to non-taxable life insurance income, CHF 58 million related to non-taxable dividend income, CHF 19 million in respect of income taxed at rates lower than the statutory tax rate, CHF 11 million related to exempt income, and various smaller items.

Changes in tax law and rates of CHF 145 million reflected a tax expense of CHF 139 million caused by the reduction of deferred tax assets from the enactment of UK corporation tax rate changes, and CHF 6 million related to changes in other countries.

Changes in deferred tax valuation allowances of CHF 76 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 308 million, mainly in respect of four of the Bank's operating entities, two in the UK, one in Hong Kong and one in Switzerland. Additionally, 2016 included an accrual of valuation allowances of CHF 91 million for previously recognized deferred tax assets in respect of one of the Bank's operating entities in Hong Kong. Also included was a tax benefit from the release of valuation allowances of CHF 193 million, mainly in respect of one of the Bank's operating entities in the UK. The change in UK corporation tax rates caused a release of valuation allowances of CHF 130 million in respect of four of the Bank's operating entities in the UK.

Change in recognition of outside basis difference of CHF 211 million reflected a tax expense related to the expected reversal of the outside basis differences relating to Swiss subsidiary investments.

Other of CHF 252 million included a tax benefit of CHF 340 million relating to the re-assessment of deferred tax balances in Switzerland reflecting changes in forecasted future profitability and CHF 33 million from prior year adjustments, partially offset by CHF 89 million tax litigation expense and associated interest and penalties relating to two Italian income tax matters which have been resolved as part of an agreement with the Italian tax authorities, and CHF 22 million relating to the increase of tax contingency accruals. The remaining balance included various smaller items.

As of December 31, 2018, the Bank had accumulated undistributed earnings from foreign subsidiaries of CHF 9.1 billion compared to CHF 4.6 billion as of December 31, 2017. The increase compared to the end of 2017 reflected a reserve transfer in one of the Bank's entities. No deferred tax liability was recorded in respect of those amounts as these earnings are considered indefinitely reinvested. It is not practicable to estimate the amount of unrecognized deferred tax liabilities for these undistributed foreign earnings.

Deferred tax assets and liabilities		
end of	2018	2017
Deferred tax assets and liabilities (CHF million)		
Compensation and benefits	944	1,095
Loans	192	330
Investment securities	1,986	1,039
Provisions	582	441
Derivatives	65	96
Real estate	278	333
Net operating loss carry-forwards	6,142	6,762
Goodwill and intangible assets	497	664
Other	197	127
Gross deferred tax assets before valuation allowance	10,883	10,887
Less valuation allowance	(3,957)	(4,224)
Gross deferred tax assets net of valuation allowance	6,926	6,663
Compensation and benefits	(257)	(278)
Loans	(87)	(36)
Investment securities	(1,170)	(197)
Provisions	(368)	(519)
Business combinations	(1)	(1)
Derivatives	(214)	(154)
Real estate	(56)	(54)
Other	(154)	(119)
Gross deferred tax liabilities	(2,307)	(1,358)
Net deferred tax assets	4,619	5,305
Net deferred tax assets of which deferred tax assets	4,619 4,887	5,305 5,457
	· · · · · · · · · · · · · · · · · · ·	
of which deferred tax assets	4,887	5,457

The decrease in net deferred tax assets from 2017 to 2018 of CHF 686 million was primarily due to the impact of CHF 691 million related to current year earnings and CHF 50 million from the re-measurement of deferred tax balances in Switzerland. These decreases were partially offset by the tax impacts directly recorded in equity and other comprehensive income, mainly related to the pension plan re-measurement and other tax recorded directly in equity of CHF 32 million and foreign exchange translation gains of CHF 23 million, which are included within the currency translation adjustments recorded in accumulated other comprehensive income/(loss) (AOCI).

Due to uncertainty concerning its ability to generate the necessary amount and mix of taxable income in future periods, the Bank recorded a valuation allowance against deferred tax assets in the amount of CHF 4.0 billion as of December 31, 2018, compared to CHF 4.2 billion as of December 31, 2017.

Amounts and expiration dates of net operating loss carry-forwards

Total
106
6,545
828
6,798
14,277
18,618
32,895

Movements in the valuation al	lowance		
in	2018	2017	2016
Movements in the valuation allowance	(CHF million)		
Balance at beginning of period	4,224	4,168	3,898
Net changes	(267)	56	270
Balance at end of period	3,957	4,224	4,168

Tax benefits associated with share-based compensation				
in	2018	2017	2016	
Tax benefits (CHF million)				
Tax benefits recorded in the consolidated statements of operations ¹	236	310	390	
Windfall tax benefits/(shortfall tax charges) recorded in additional paid-in capital ²	-	-	(110)	

- 1 Calculated at the statutory tax rate before valuation allowance considerations.
- 2 As a result of the adoption of ASU 2016-09 windfall tax benefits and shortfall tax charges on share-based compensation are recognized in the consolidated statements of operations and no longer in additional paid-in capital.
- → Refer to "Note 28 Employee deferred compensation" for further information on share-based compensation.

Uncertain tax positions

Reconciliation of the beginning and ending amount of gross unrecognized tax benefits					
in	2018	2017	2016		
Movements in gross unrecognized tax benefits (CHF million)					
Balance at beginning of period	481	401	360		
Increases in unrecognized tax benefits as a result of tax positions taken during a prior period	10	131	52		
Decreases in unrecognized tax benefits as a result of tax positions taken during a prior period	(2)	(95)	(43)		
Increases in unrecognized tax benefits as a result of tax positions taken during the current period	112	117	17		
Decreases in unrecognized tax benefits relating to settlements with tax authorities	0	(73)	(2)		
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations	(4)	(3)	(7)		
Other (including foreign currency translation)	(23)	3	24		
Balance at end of period	574	481	401		
of which, if recognized, would affect the effective tax rate	574	481	401		

Interest and penalties			
in	2018	2017	2016
Interest and penalties (CHF million)			
Interest and penalties recognized in the consolidated statements of operations	(28)	30	2
Interest and penalties recognized in the consolidated balance sheets	87	115	85

Interest and penalties are reported as tax expense. The Bank is currently subject to ongoing tax audits, inquiries and litigation with the tax authorities in a number of jurisdictions, including Brazil, the Netherlands, the US, the UK and Switzerland. Although the

timing of completion is uncertain, it is reasonably possible that some of these will be resolved within 12 months of the reporting date. It is reasonably possible that there will be a decrease of between zero and CHF 26 million in unrecognized tax benefits within 12 months of the reporting date.

The Bank remains open to examination from federal, state, provincial or similar local jurisdictions from the following years onward in these major countries: Brazil – 2014; the UK – 2012; Switzerland – 2011; the US – 2010; and the Netherlands – 2006.

→ Refer to "Note 28 – Tax" in VI – Consolidated financial statements – Credit Suisse Group for further information.

28 Employee deferred compensation

The following tables show the compensation expense for deferred compensation awards granted in 2018 and prior years that was recognized in the consolidated statements of operations during 2018, 2017 and 2016, the total shares delivered, the estimated unrecognized compensation expense for deferred compensation awards granted in 2018 and prior years outstanding as of December 31, 2018 and the remaining requisite service period over which the estimated unrecognized compensation expense will be recognized. The recognition of compensation expense for the deferred compensation awards granted in February 2019 began in 2019 and thus had no impact on the 2018 consolidated financial statements.

→ Refer to "Note 29 – Employee deferred compensation" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Deferred compensation expense				
in	2018	2017	2016	
Deferred compensation expense (CHF mi	llion)			
Share awards	512	519	624	
Performance share awards	371	342	370	
Contingent Capital Awards	149	277	234	
Contingent Capital share awards	1	17	30	
Capital Opportunity Facility awards	12	14	13	
Plus Bond awards ¹		_	5	
2008 Partner Asset Facility awards ²		7	13	
Other cash awards	257	417	331	
Total deferred compensation expense	1,302	1,593	1,620	
Total shares delivered (million)	·			
Total shares delivered	45.0	41.2	41.5	

- 1 Compensation expense primarily relates to mark-to-market changes of the underlying assets of the Plus Bonds and the amortization of the voluntary Plus Bonds elected in the first quarter of 2013 and expensed over a three-year vesting period.
- 2 Compensation expense mainly includes the change in the underlying fair value of the indexed assets during the period.

Estimated unrecognized deferred compen	sation	
end of		2018
Estimated unrecognized compensation expense (CHI	F million)	
Share awards		455
Performance share awards		161
Contingent Capital Awards		136
Other cash awards		160
Total		912

Aggregate remaining weighted-average requisite service period (years) Aggregate remaining weighted-average requisite service period 1.3

Does not include the estimated unrecognized compensation expense relating to grants made in 2019 for 2018.

Share awards

On February 15, 2019, the Bank granted 54.0 million share awards with a total value of CHF 620 million. The estimated unrecognized compensation expense of CHF 611 million was determined based on the fair value of the awards on the grant date, includes the current estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules.

Share awards granted for previous years				
For compensation year	2018	2017	2016	
Shares awarded (million)	54.0	33.1	37.6	
Value of shares awarded (CHF million)	620	596	563	

On February 15, 2019, the Bank granted 2.7 million blocked shares with a total value of CHF 31 million that vested immediately upon grant, have no future service requirements and were attributed to services performed in 2018.

Blocked share awards granted for previous years				
For compensation year	2018	2017	2016	
Blocked shares awarded (million)	2.7	1.9	2.4	
Value of shares awarded (CHE million)	31	35	37	

Share award activities						
		2018		2017		2016
	Number of share awards in million	Weighted- average grant-date fair value in CHF	Number of share awards in million	Weighted- average grant-date fair value in CHF	Number of share awards in million	Weighted- average grant-date fair value in CHF
Share awards						
Balance at beginning of period	79.9	15.77	70.8	18.78	79.0	21.56
Granted	40.5	16.97	51.5 ¹	14.54	38.1	17.59
Settled	(39.0)	16.02	(36.8)	19.75	(37.2)	22.68
Forfeited	(4.3)	16.33	(5.6) ²	16.47	(9.1)	21.88
Balance at end of period	77.1	16.23	79.9	15.77	70.8	18.78
of which vested	8.4	_	7.8	-	8.1	_
of which unvested	68.7		72.1		62.7	

¹ Includes an adjustment for share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional shares granted.

Performance share awards

On February 15, 2019, the Bank granted 44.6 million performance share awards with a total value of CHF 515 million. The estimated unrecognized compensation expense of CHF 505 million was determined based on the fair value of the awards on the grant date, includes the current estimated outcome of the relevant performance criteria and estimated future forfeitures and

will be recognized over the vesting period, subject to early retirement rules.

Performance share awards granted for previous years				
For compensation year	2018	2017	2016	
Performance shares awarded (million)	44.6	25.6	29.6	
Value of performance shares awarded (CHF million)	515	462	449	

Performance share award activities						
		2018		2017		2016
	Number of performance share awards in million	Weighted- average grant-date fair value in CHF	share	Weighted- average grant-date fair value in CHF	Number of performance share awards in million	Weighted- average grant-date fair value in CHF
Performance share awards						
Balance at beginning of period	52.8	15.88	48.1	19.12	55.5	21.01
Granted	25.6	16.98	31.1 ¹	14.41	21.3	18.62
Settled	(25.6)	16.07	(23.6)	20.41	(26.4)	22.66
Forfeited	(2.8)	16.26	(2.8) ²	16.37	(2.3)	18.98
Balance at end of period	50.0	16.33	52.8	15.88	48.1	19.12
of which vested	5.2	_	6.6	-	6.8	_
of which unvested	44.8	_	46.2	-	41.3	_

¹ Includes an adjustment for performance share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional performance shares granted.

² Includes the transfer of the share-based awards of Neue Aargauer Bank AG, BANK-now AG and Swisscard AECS GmbH.

² Includes the transfer of the share-based awards of Neue Aargauer Bank AG, BANK-now AG and Swisscard AECS GmbH.

Contingent Capital Awards

On February 15, 2019, the Bank awarded CHF 289 million of Contingent Capital Awards (CCA) that will be expensed over the vesting period. The estimated unrecognized compensation expense of CHF 264 million was determined based on the fair value of the awards on the grant date and includes the current estimated outcome of the relevant performance criteria, the estimated future forfeitures and the expected semi-annual cash payments of interest equivalents and will be recognized over the vesting period.

Contingent Capital Awards granted for previous years				
For compensation year	2018	2017	2016	
CCA awarded (CHF million)	289	233	228	

Contingent Capital share awards

In March 2016, the Bank executed a voluntary exchange offer, under which employees had the right to voluntarily convert all or a portion of their respective CCA into Contingent Capital share awards at a conversion price of CHF 14.57. CCA holders elected to convert CHF 213 million of their CCA into Contingent Capital share awards during the election period. This fair value represented an approximate conversion rate of 15%. Each Contingent Capital share award had a grant-date fair value of CHF 14.45 and contains the same contractual term, vesting period, performance criteria and other terms and conditions as the original CCA.

Contingent Capital share award activities

	2018	2017	2016
Contingent Capital share awards			
Balance at beginning of period	7.5	12.8	-
Granted	0.0	0.31	15.6
Settled	(4.6)	(4.9)	(2.5)
Forfeited	(0.2)	(0.7) ²	(0.3)
Balance at end of period	2.7	7.5	12.8
of which vested	0.7	1.3	1.0
of which unvested	2.0	6.2	11.8

¹ Includes an adjustment for Contingent Capital share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional Contingent Capital shares granted.

2008 Partner Asset Facility awards

During 2017, the final settlement of the outstanding PAF awards of CHF 789 million was made.

Other cash awards

During 2018, the Bank granted deferred fixed cash compensation of CHF 98 million to certain employees in the Americas. This compensation will be expensed in the Global Markets, Investment Banking & Capital Markets and International Wealth Management divisions over a three-year vesting period from the grant date. Amortization of this compensation totaled CHF 52 million in 2018.

During 2017, the Bank granted deferred cash retention awards of CHF 65 million relating to the reorganization of the Asia Pacific business. These awards will be expensed over a two-year vesting period from the grant date. Amortization of these awards totaled CHF 28 million in 2017 and was recognized in the Corporate Center. The Bank granted deferred fixed cash awards of CHF 90 million to certain employees in the US. These awards will be expensed in the Global Markets, Investment Banking & Capital Markets and International Wealth Management divisions over a three-year vesting period from the grant date. Amortization of these awards totaled CHF 48 million in 2017.

In 2016, the Bank granted deferred share and cash retention awards of CHF 249 million relating to the reorganization of the Global Markets and Investment Banking & Capital Markets businesses. These awards will be expensed over a vesting period of up to seven years from the grant date. Amortization of these awards in 2016 of CHF 118 million was recognized in the Corporate Center.

² Includes the transfer of the share-based awards of Neue Aargauer Bank AG, BANK-now AG and Swisscard AECS GmbH.

29 Related parties

The Group owns all of the Bank's outstanding voting registered shares. The Bank is involved in significant financing and other transactions with subsidiaries of the Group. The Bank generally enters into these transactions in the ordinary course of business and believes that these transactions are generally on market terms that could be obtained from unrelated third parties.

→ Refer to "Note 30 – Related parties" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Related party assets and liabilities				
end of	2018	2017		
Assets (CHF million)				
Net loans	5,305	4,100		
Other assets	508	208		
Total assets	5,813	4,308		
Liabilities (CHF million)				
Due to banks/customer deposits	1,338	1,141		
Short-term borrowings	493	489		
Long-term debt	23,456	15,612		
Other liabilities	1,122	851		
Total liabilities	26,409	18,093		

Total operating expenses	1,642	1,044 ¹	152
Expenses (CHF million)			
Net revenues	(755)	(459)	(122)
Other revenues	72	67	119
Commissions and fees	87	46	41
Net interest income	(914)	(572)	(282)
Interest expense	(924)	(574)	(280)
Interest and dividend income	10	2	(2)
Revenues (CHF million)			
in	2018	2017	2016
Related party revenues and	expenses		

¹ Prior period has been corrected.

Related party guarantees		
end of	2018	2017
Guarantees (CHF million)		
Credit guarantees and similar instruments	5	4
Total guarantees	5	4

Executive Board and Board of	Directors loa	ns	
	2018	2017	2016
Loans to members of the Executive Bo	ard (CHF million)	
Balance at beginning of period	26 ¹	25	26
Additions	8	3	6
Reductions	(1)	(2)	(7)
Balance at end of period	33 ¹	26	25
Loans to members of the Board of Dire	ectors (CHF milli	on)	
Balance at beginning of period	11 ²	10	8
Additions	0	1	3
Reductions	(1)	0	(1)
Balance at end of period	10 ²	11	10

- 1 The number of individuals with outstanding loans at the beginning and the end of the year was seven and eight, respectively.
- 2 The number of individuals with outstanding loans at the beginning and the end of the year was four.

Liabilities due to own pension plans

Liabilities due to the Bank's own defined benefit pension plans as of December 31, 2018 and 2017 of CHF 735 million and CHF 336 million, respectively, were reflected in various liability accounts in the Bank's consolidated balance sheets.

30 Pension and other post-retirement benefits

The Bank participates in a defined benefit pension plan sponsored by the Group and has defined contribution pension plans, single-employer defined benefit pension plans and other post-retirement defined benefit plans. The Bank's principal plans are located in Switzerland, the US and the UK.

→ Refer to "Note 31 – Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group for further information on pension and other post-retirement benefits.

Defined contribution pension plans

The Bank contributes to various defined contribution pension plans primarily in the US and the UK as well as other countries throughout the world. During 2018, 2017 and 2016, the Bank contributed to these plans and recognized as expense CHF 140 million, CHF 156 million and CHF 160 million, respectively.

Defined benefit pension and other post-retirement benefit plans

Defined benefit pension plans

Group pension plan

The Bank covers pension requirements for its employees in Switzerland by participating in a defined benefit pension plan sponsored by the Group (Group plan), the Group's most significant defined benefit pension plan. The Group plan provides benefits in the event of retirement, death and disability. Various legal entities within the Group participate in the Group plan, which is set up as an independent trust domiciled in Zurich. Benefits in the Group plan are determined on the basis of the accumulated employer and employee contributions and accumulated interest credited. In accordance with US GAAP, the Group accounts for the Group plan as a single-employer defined benefit pension plan and uses the projected unit credit actuarial method to determine the net periodic benefit costs, the PBO and the accumulated benefit obligation (ABO). The Bank accounts for the defined benefit pension plan sponsored by the Group as a multi-employer pension plan because other legal entities within the Group also participate in the Group plan and the assets contributed by the Bank are not segregated into a separate account or restricted to provide benefits only to employees of the Bank. The assets contributed by the Bank are commingled with the assets contributed by the other legal entities of the Group and can be used to provide benefits to any employee of any participating legal entity. The Bank's contributions to the Group plan comprise 88% of the total assets contributed to the Group plan by all participating legal entities on an annual basis.

The Bank accounts for the Group plan on a defined contribution basis whereby it only recognizes the amounts required to be contributed to the Group plan during the period as net periodic pension expense and only recognizes a liability for any contributions due and unpaid. No other expenses or balance sheet amounts related to the Group plan were recognized by the Bank. In the savings section of the Group plan, the Bank's contribution varies between 7.5% and 25.0% of the pensionable salary depending on the employees' age.

During 2018, 2017 and 2016, the Bank contributed and recognized as expense CHF 377 million, CHF 379 million and CHF 438 million to the Group plan, respectively. The Bank expects to contribute CHF 323 million to the Group plan during 2019.

International pension plans

Various defined benefit pension plans cover the Bank's employees outside Switzerland. These plans provide benefits in the event of retirement, death, disability or termination of employment. Retirement benefits under the plans depend on age, contributions and salary. The Bank's principal defined benefit pension plans outside Switzerland are located in the US and in the UK. Both plans are funded, closed to new participants and have ceased accruing new benefits. Smaller defined benefit pension plans, both funded and unfunded, are operated in other locations.

Other post-retirement defined benefit plans

In the US, the Bank's defined benefit plans provide post-retirement benefits other than pension benefits that primarily focus on health and welfare benefits for certain retired employees. In exchange for the current services provided by the employee, the Bank promises to provide health and welfare benefits after the employee retires. The Bank's obligation for that compensation is incurred as employees render the services necessary to earn their post-retirement benefits.

Net periodic benefit costs of defined benefit plans

The net periodic benefit costs for defined benefit pension and other post-retirement defined benefit plans are the costs of the respective plan for a period during which an employee renders services. The actual amount to be recognized is determined using the standard actuarial methodology which considers, among other factors, current service cost, interest cost, expected return on plan assets and the amortization of both prior service cost/(credit) and actuarial losses/(gains) recognized in AOCI.

Components of net periodic benefit costs International single-employer defined benefit pension plans Other post-retirement defined benefit plans in Net periodic benefit costs (CHF million) Service costs on benefit obligation Interest costs on benefit obligation (114)(133)(175) Expected return on plan assets Amortization of recognized actuarial losses/(gains) Settlement losses/(gains) Curtailment losses/(gains) (1) (10)Net periodic benefit costs/(credits)

Service costs on benefit obligation reflected in compensation and benefits – other for 2018, 2017 and 2016 were CHF 16 million, CHF 22 million and CHF 20 million, respectively. During the second half of 2016, lump-sum settlement offers were made to terminated vested members of the pension fund in the US. As a result of members accepting this offer, there was an additional cost of CHF 72 million relating to the settlement of pension obligations for these members.

Benefit obligation

The following table shows the changes in the PBO, the ABO, the fair value of plan assets and the amounts recognized in the consolidated balance sheets for the international single-employer defined benefit pension plans and other post-retirement defined benefit plans.

Obligations and funded status of the plans				
	singl defi	nternational e-employer ned benefit ension plans	Other post-retiremen defined benefit plans	
in / end of	2018	2017	2018	2017
PBO (CHF million) ¹				
Beginning of the measurement period	3,390	3,337	173	184
Service cost	16	22	0	0
Interest cost	86	91	5	6
Plan amendments	10	0	0	0
Settlements	(1)	0	0	0
Curtailments	(1)	(11)	0	0
Special termination benefits	1	1	0	0
Actuarial losses/(gains)	(229)	171	(9)	2
Benefit payments	(233)	(287)	(11)	(11)
Exchange rate losses/(gains)	(88)	66	2	(8)
End of the measurement period	2,951	3,390	160	173
Fair value of plan assets (CHF million)				
Beginning of the measurement period	4,088	4,000	0	0
Actual return on plan assets	(141)	256	0	0
Employer contributions	19	22	11	11
Settlements	(1)	0	0	0
Benefit payments	(233)	(287)	(11)	(11)
Exchange rate gains/(losses)	(128)	97	0	0
End of the measurement period	3,604	4,088	0	0
Total funded status recognized (CHF million)				
Funded status of the plan – over/(underfunded)	653	698	(160)	(173)
Funded status recognized in the consolidated balance sheet as of December 31	653	698	(160)	(173)
Total amount recognized (CHF million)				
Noncurrent assets	1,001	1,058	0	0
Current liabilities	(10)	(11)	(11)	(11)
Noncurrent liabilities	(338)	(349)	(149)	(162)
Net amount recognized in the consolidated balance sheet as of December 31	653	698	(160)	(173)
ABO (CHF million) ²				
7.20 (0.11 111111011)				

¹ Including estimated future salary increases.

The net amount recognized in the consolidated balance sheets as of December 31, 2018 and 2017 was an overfunding of CHF 493 million and CHF 525 million, respectively.

In 2018 and 2017, the Bank made contributions of CHF 19 million and CHF 22 million, respectively, to the international single-employer defined benefit pension plans and CHF 11 million and CHF 11 million, respectively, to the other post-retirement defined benefit plans. In 2019 the Bank expects to contribute CHF 16 million to the international single-employer defined benefit pension plans and CHF 11 million to other post-retirement defined benefit plans.

PBO or ABO in excess of plan assets

The following table shows the aggregate PBO and ABO, as well as the aggregate fair value of plan assets for those plans with PBO in excess of plan assets and those plans with ABO in excess of plan assets as of December 31, 2018 and 2017, respectively.

² Excluding estimated future salary increases.

Defined benefit pension plans in which PBO or ABO exceeded plan assets

	PBO exceed of	ds fair value plan assets 1	ABO exceeds fair value of plan assets 1		
December 31	2018	2017	2018	2017	
PBO/ABO exceeded plan assets (CHF million)					
PBO PBO	1,336	1,464	1,325	1,447	
ABO	1,312	1,433	1,304	1,420	
Fair value of plan assets	989	1,104	978	1,088	

¹ Includes only those defined benefit pension plans where the PBO/ABO exceeded the fair value of plan assets.

Amount recognized in AOCI and OCI

The following table shows the actuarial gains/(losses) and prior service credit/(cost) which were recorded in AOCI and subsequently recognized as components of net periodic benefit costs.

Amounts recognized in AOCI, net of tax

	single defi	nternational e-employer ned benefit nsion plans	Other post- defined be			Total
end of	2018	2017	2018	2017	2018	2017
Amounts recognized in AOCI (CHF million)						
Actuarial gains/(losses)	(327)	(345)	(23)	(36)	(350)	(381)
Prior service credit/(cost)	(11)	(1)	3	3	(8)	2
Total	(338)	(346)	(20)	(33)	(358)	(379)

The following tables show the changes in OCI due to actuarial gains/(losses) and prior service credit/(cost) recognized in AOCI during 2018 and 2017 and the amortization of the

aforementioned items as components of net periodic benefit costs for these periods, as well as the amounts expected to be amortized in 2019.

Amounts recognized in OCI

	Inter defin	International single-employer defined benefit pension plans			Other post-retirement defined benefit plans		
in	Gross	Tax	Net	Gross	Tax	Net	Total net
2018 (CHF million)							
Actuarial gains/(losses)	(26)	1	(25)	9	(2)	7	(18)
Prior service credit/(cost)	(10)	0	(10)	0	0	0	(10)
Amortization of actuarial losses/(gains)	47	(4)	43	8	(2)	6	49
Total	11	(3)	8	17	(4)	13	21
2017 (CHF million)							
Actuarial gains/(losses)	(48)	14	(34)	(2)	1	(1)	(35)
Amortization of actuarial losses/(gains)	60	(7)	53	7	(3)	4	57
Total	12	7	19	5	(2)	3	22

Amounts in AOCI, net of tax, expected to be amortized

Total	16	2
Amortization of prior service cost/(credit)	1	0
Amortization in 2019 (CHF million) Amortization of actuarial losses/(gains)	15	2
single defin pen	ernational -employer ed benefit sion plans	Other post-retirement defined benefit plans

Assumptions

The measurement of both the net periodic benefit costs and the benefit obligation is determined using explicit assumptions, each of which individually represents the best estimate of a particular future event.

Weighted-average assumptions used to determine net periodic benefit costs and benefit obligation

December 31	Inte defir	Other post-retirement defined benefit plans				
	2018	2017	2016	2018	2017	2016
Net periodic benefit cost (%)						
Discount rate – service cost	2.96	2.92	4.05	3.86	4.03	4.50
Discount rate - interest cost	2.77	2.79	4.05	3.28	3.48	4.50
Salary increases	2.97	3.55	3.56	-	-	_
Expected long-term rate of return on plan assets	3.22	3.88	5.07			
Benefit obligation (%)						
Discount rate	3.30	2.83	3.10	4.37	3.70	4.21
Salary increases	2.90	2.97	3.55		_	

Mortality tables and life expectancies for major plans

			L for	ife expectancy a male membe	at age 65 er currently	for a		Life expectancy at age 65 or a female member currently			
			aged 65		aged 45	aged 65		aged 65		aged 45	
December	r 31	2018	2017	2018	2017	2018	2017	2018	2017		
Life expe	ectancy (years)										
UK	SAPS S2 light tables ¹	23.7	23.8	25.3	25.4	24.8	24.8	26.5	26.6		
US	RP-2014 mortality tables ²	21.5	21.5	22.7	22.7	23.4	23.3	24.5	24.4		
	<u> </u>										

^{1 95%} of Self-Administered Pension Scheme (SAPS) S2 light tables were used, which included final CMI projections, with a long-term rate of improvement of 1.5% per annum.

² The Retirement Projection 2014 (RP-2014) mortality tables were used, with projections based on the Social Security Administration's intermediate improvement scale.

Health care cost assumptions

The health care cost trend is used to determine the appropriate other post-retirement defined benefit costs. In determining those costs, an annual weighted-average rate is assumed in the cost of covered health care benefits.

The following table provides an overview of assumed health care cost trend rates and the sensitivity of a one percentage point increase or decrease of the rate.

Health care cost trend rates and sensitivity			
in / end of	2018	2017	2016
Health care cost trend rate (%)			
Annual weighted-average health care cost trend rate ¹	8.7	8.3	8.3
Increase/(decrease) in post-retirement expenses (CHF million)			
One percentage point increase in health care cost trend rates	0.1	0.1	0.2
One percentage point decrease in health care cost trend rates	(0.1)	(0.1)	(0.2)
Increase/(decrease) in post-retirement benefit obligation (CHF million)			
One percentage point increase in health care cost trend rates	3	3	4
One percentage point decrease in health care cost trend rates	(3)	(3)	(4)

¹ The annual health care cost trend rate is assumed to decrease gradually to achieve the long-term health care cost trend rate of 5.0% by 2026.

The annual health care cost trend rate used to determine the defined benefit cost for 2019 is 8.7%.

Plan assets and investment strategy

As of December 31, 2018 and 2017, no Group debt or equity securities were included in plan assets for the international single-employer defined benefit pension plans.

Fair value of plan assets

The following tables present the plan assets measured at fair value on a recurring basis as of December 31, 2018 and 2017, for the Bank's defined benefits plans.

Plan assets measured at fa	air value on	a recurrin	ng basis							
end of					2018					2017
	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total
Plan assets at fair value (CHF mill	ion)									
Cash and cash equivalents	86	123	0	0	209	70	133	0	0	203
Debt securities	1,889	846	0	328	3,063	1,991	1,080	0	370	3,441
of which governments	1,574	5	0	0	1,579	1,622	9	0	0	1,631
of which corporates	315	841	0	328	1,484	369	1,071	0	370	1,810
Equity securities	52	12	0	74	138	55	14	0	147	216
Real estate – indirect	0	0	0	29	29	0	0	0	27	27
Alternative investments	0	19	0	61	80	0	33	0	76	109
of which hedge funds	0	0	0	61	61	0	0	0	76	76
of which other	0	19 ¹	0	0	19	0	33 1	0	0	33
Other investments	0	85	0	0	85	0	92	0	0	92
Total plan assets at fair value	2,027	1,085	0	492	3,604	2,116	1,352	0	620	4,088

 $^{{\}bf 1}$ Primarily related to derivative instruments.

Plan assets measured at fair value on a recurring basis for level 3

					Actual return n plan assets			
	Balance at beginning of period	Transfers in	Transfers out	On assets still held at reporting date	On assets sold during the period	Purchases, sales, settlements	Foreign currency translation impact	Balance at end of period
2017 (CHF million)								
Debt securities – corporates	7	0	0	0	0	(7)	0	0
Total plan assets at fair value	7	0	0	0	0	(7)	0	0

Plan asset allocation

The following table shows the plan asset allocation as of the measurement date calculated based on the fair value at that date including the performance of each asset class.

Plan asset allocation		
December 31	2018	2017
Weighted-average (%)		
Cash and cash equivalents	5.8	5.0
Debt securities	85.0	84.0
Equity securities	3.8	5.3
Real estate	0.8	0.7
Alternative investments	2.2	2.7
Insurance	2.4	2.3
Total	100.0	100.0

The following table shows the target plan asset allocation for 2019 in accordance with the Bank's investment strategy. The target plan asset allocation is used to determine the expected return on plan assets to be considered in the net periodic benefit costs for 2019.

2019 target plan asset allocation

Weighted-average (%)
--------------------	----

Total											1	100.0
Insurance												2.4
Alternative investments	 		 _			_				_	 	2.7
Real estate	 	_		_			_	_	_	_		0.6
Equity securities												5.1
Debt securities	 		 	_	 _		 _	_	 _	_	 	88.9
Cash and cash equivalents	 		 	_			 _	_	 _	_	 	0.3

Estimated future benefit payments

The following table shows the estimated future benefit payments for defined benefit pension and other post-retirement defined benefit plans.

Estimated future benefit payments

	International single-employer defined benefit pension plans	Other post-retirement defined benefit plans		
Payments (CHF million)				
2019	92	11		
2020	90	12		
2021	107	12		
2022	98	12		
2023	108	12		
For five years thereafter	622	53		

31 Derivatives and hedging activities

→ Refer to "Note 32 – Derivatives and hedging activities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

flows for forecasted transactions, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments, was five years.

Hedge accounting

Cash flow hedges

As of the end of 2018, the maximum length of time over which the Bank hedged its exposure to the variability in future cash

Fair value of derivative instruments						
			Trading			Hedging ¹
end of 2018	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	7,477.7	3.6	3.7	0.0	0.0	0.0
Swaps	13,221.5	49.0	45.4	44.6	0.1	0.2
Options bought and sold (OTC)	2,027.6	17.0	17.1	0.0	0.0	0.0
Futures	256.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	111.1	0.3	0.3	0.0	0.0	0.0
Interest rate products	23,094.7	69.9	66.5	44.6	0.1	0.2
Forwards	1,124.5	9.5	10.5	12.0	0.1	0.1
Swaps	456.6	14.4	17.4	0.0	0.0	0.0
Options bought and sold (OTC)	313.0	3.9	4.3	0.0	0.0	0.0
Futures	10.7	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.3	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	1,906.1	27.8	32.2	12.0	0.1	0.1
Forwards	0.7	0.2	0.1	0.0	0.0	0.0
Swaps	152.9	4.1	5.0	0.0	0.0	0.0
Options bought and sold (OTC)	212.3	7.3	6.7	0.0	0.0	0.0
Futures	39.2	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	356.7	11.9	14.4	0.0	0.0	0.0
Equity/index-related products	761.8	23.5	26.2	0.0	0.0	0.0
Credit derivatives ²	469.4	5.4	6.6	0.0	0.0	0.0
Forwards	8.2	0.1	0.1	0.0	0.0	0.0
Swaps	13.5	1.5	0.6	0.0	0.0	0.0
Options bought and sold (OTC)	9.5	0.1	0.1	0.0	0.0	0.0
Futures	9.3	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.9	0.0	0.0	0.0	0.0	0.0
Other products ³	42.4	1.7	0.8	0.0	0.0	0.0
Total derivative instruments	26,274.4	128.3	132.3	56.6	0.2	0.3

The notional amount, PRV and NRV (trading and hedging) was CHF 26,331.0 billion, CHF 128.5 billion and CHF 132.6 billion, respectively, as of December 31, 2018.

¹ Relates to derivative contracts that qualify for hedge accounting under US GAAP.

² Primarily credit default swaps.

 $^{{\}bf 3}$ Primarily precious metals, commodity and energy products.

Fair value of derivative instruments (continued)

			Trading		Hedging ¹	
end of 2017	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	8,509.3	1.2	1.2	0.0	0.0	0.0
Swaps	13,048.8	60.4	56.3	46.8	0.2	0.2
Options bought and sold (OTC)	2,374.5	25.2	24.0	0.0	0.0	0.0
Futures	547.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	419.2	0.2	0.3	0.0	0.0	0.0
Interest rate products	24,899.6	87.0	81.8	46.8	0.2	0.2
Forwards	1,387.9	10.7	11.1	13.3	0.0	0.2
Swaps	581.1	15.2	19.9	0.0	0.0	0.0
Options bought and sold (OTC)	414.8	4.6	4.8	2.1	0.0	0.0
Futures	13.0	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	5.4	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	2,402.2	30.5	35.8	15.4	0.0	0.2
Forwards	0.9	0.0	0.1	0.0	0.0	0.0
Swaps	199.1	3.8	4.9	0.0	0.0	0.0
Options bought and sold (OTC)	221.8	8.6	8.5	0.0	0.0	0.0
Futures	32.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	373.2	9.3	10.3	0.0	0.0	0.0
Equity/index-related products	827.8	21.7	23.8	0.0	0.0	0.0
Credit derivatives ²	524.9	7.7	8.9	0.0	0.0	0.0
Forwards	7.0	0.0	0.1	0.0	0.0	0.0
Swaps	17.9	1.5	1.4	0.0	0.0	0.0
Options bought and sold (OTC)	10.1	0.1	0.0	0.0	0.0	0.0
Futures	15.6	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	2.1	0.0	0.0	0.0	0.0	0.0
Other products ³	52.7	1.6	1.5	0.0	0.0	0.0
Total derivative instruments	28,707.2	148.5	151.8	62.2	0.2	0.4

The notional amount, PRV and NRV (trading and hedging) was CHF 28,769.4 billion, CHF 148.7 billion and CHF 152.2 billion, respectively, as of December 31, 2017.

¹ Relates to derivative contracts that qualify for hedge accounting under US GAAP.

² Primarily credit default swaps.

 $[\]boldsymbol{3}$ Primarily precious metals, commodity and energy products.

Fair value hedges			
in	2018	2017	2016
Gains/(losses) recognized in income on de	erivatives (C	HF million)	
Interest rate products	(415)	(285)	(116)
Total	(415)	(285)	(116)
Gains/(losses) recognized in income on he	edged items	(CHF millio	n)
Interest rate products	423	290	111
Total	423	290	111
Details of fair value hedges (CHF million)			·
Net gains/(losses) on the ineffective portions	8	5	(5)

Cash flow hedges			
in	2018	2017	2016
Gains/(losses) recognized in AOCI on deriv	atives (CHF	million)	
Interest rate products	(76)	(56)	(5)
Foreign exchange products	(86)	(31)	(3)
Total	(162)	(87)	(8)
Gains/(losses) reclassified from AOCI into	income (CHF	million)	
Interest rate products ¹	(85)	(11)	29
Foreign exchange products	(42) ^{2,3}	(17) ²	(7) ³
Total	(127)	(28)	22
Details of cash flow hedges (CHF million)			
Net gains/(losses) on the ineffective portions 2	0	(1)	(1)

Represents gains/(losses) on effective portion.

1 Included in interest and other dividend income.

Represents gains/(losses) recognized in trading revenues.

- 2 Included in trading revenues.
- $\boldsymbol{3}$ Included in total other operating expenses.

The net loss associated with cash flow hedges expected to be reclassified from AOCI within the next 12 months was CHF 39 million.

Net investment hedges			
in	2018	2017	2016
Gains/(losses) recognized in AOCI	on derivatives (C	HF million)	
Foreign exchange products	131	(475)	(537)
Total	131	(475)	(537)

Represents gains/(losses) on effective portion.

The Bank includes all derivative instruments not included in hedge accounting relationships in its trading activities.

→ Refer to "Note 7 – Trading revenues" for gains and losses on trading activities by product type.

Disclosures relating to contingent credit risk

The following table provides the Bank's current net exposure from contingent credit risk relating to derivative contracts with bilateral counterparties and special purpose entities (SPEs) that include credit support agreements, the related collateral posted and the additional collateral required in a one-notch, two-notch and a three-notch downgrade event, respectively. The table also includes derivative contracts with contingent credit risk features without credit support agreements that have accelerated termination event conditions. The current net exposure for derivative contracts with bilateral counterparties and contracts with accelerated termination event conditions is the aggregate fair value of derivative instruments that were in a net liability position. For SPEs, the current net exposure is the contractual amount that is used to determine the collateral payable in the event of a downgrade. The contractual amount could include both the negative replacement value and a percentage of the notional value of the derivative.

Contingent credit risk								
				2018				2017
end of	Bilateral counterparties	Special purpose entities	Accelerated terminations	Total o	Bilateral counterparties	Special purpose entities	Accelerated terminations	Total
Contingent credit risk (CHF billion)								
Current net exposure	3.6	0.1	0.3	4.0	5.4	0.1	1.2	6.7
Collateral posted	3.4	0.1	-	3.5	4.4	0.1	_	4.5
Impact of a one-notch downgrade event	0.2	0.0	0.0	0.2	0.2	0.1	0.1	0.4
Impact of a two-notch downgrade event	0.9	0.0	0.1	1.0	0.9	0.2	0.5	1.6
Impact of a three-notch downgrade event	1.0	0.1	0.2	1.3	1.0	0.4	0.7	2.1

The impact of a downgrade event reflects the amount of additional collateral required for bilateral counterparties and special purpose entities and the amount of additional termination expenses for accelerated terminations, respectively.

Credit derivatives

→ Refer to "Note 32 – Derivatives and hedging activities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Credit protection sold/purchased

The following tables do not include all credit derivatives and differ from the credit derivatives in the "Fair value of derivative instruments" table. This is due to the exclusion of certain credit derivative instruments under US GAAP, which defines a credit derivative as a derivative instrument (a) in which one or more of its underlyings are related to the credit risk of a specified entity (or a group of entities) or an index based on the credit risk of a group of entities and (b) that exposes the seller to potential loss from credit risk-related events specified in the contract.

Total return swaps (TRS) of CHF 9.7 billion and CHF 6.7 billion as of December 31, 2018 and 2017, respectively, were also excluded because a TRS does not expose the seller to potential loss from credit risk-related events specified in the contract. A TRS only provides protection against a loss in asset value and not against additional amounts as a result of specific credit events.

Credit protection sold/purchased

					2018					2017
end of	Credit protection sold	Credit protection purchased ¹	Net credit protection (sold)/ purchased	Other protection purchased	Fair value of credit protection sold	Credit protection sold	Credit protection purchased ¹	Net credit protection (sold)/ purchased	Other protection purchased	Fair value of credit protection sold
Single-name instruments (CHF bi	illion)									
Investment grade 2	(46.0)	43.1	(2.9)	11.8	0.2	(57.6)	53.8	(3.8)	15.3	0.9
Non-investment grade	(26.2)	24.3	(1.9)	17.7	(0.2)	(28.2)	25.5	(2.7)	14.3	0.5
Total single-name instruments	(72.2)	67.4	(4.8)	29.5	0.0	(85.8)	79.3	(6.5)	29.6	1.4
of which sovereign	(16.4)	15.0	(1.4)	5.5	(0.1)	(21.0)	19.2	(1.8)	6.2	0.2
of which non-sovereign	(55.8)	52.4	(3.4)	24.0	0.1	(64.8)	60.1	(4.7)	23.4	1.2
Multi-name instruments (CHF bill	ion)									
Investment grade 2	(102.9)	102.4	(0.5)	25.1	(0.8)	(107.1)	104.7	(2.4)	59.3	0.7
Non-investment grade	(26.5)	25.3	(1.2)	8.4 ³	0.1	(21.0)	19.6	(1.4)	12.0 3	0.9
Total multi-name instruments	(129.4)	127.7	(1.7)	33.5	(0.7)	(128.1)	124.3	(3.8)	71.3	1.6
of which sovereign	(0.2)	0.2	0.0	0.0	0.0	(0.3)	0.3	0.0	0.3	0.0
of which non-sovereign	(129.2)	127.5	(1.7)	33.5	(0.7)	(127.8)	124.0	(3.8)	71.0	1.6
Total instruments (CHF billion)										
Investment grade 2	(148.9)	145.5	(3.4)	36.9	(0.6)	(164.7)	158.5	(6.2)	74.6	1.6
Non-investment grade	(52.7)	49.6	(3.1)	26.1	(0.1)	(49.2)	45.1	(4.1)	26.3	1.4
Total instruments	(201.6)	195.1	(6.5)	63.0	(0.7)	(213.9)	203.6	(10.3)	100.9	3.0
of which sovereign	(16.6)	15.2	(1.4)	5.5	(0.1)	(21.3)	19.5	(1.8)	6.5	0.2
of which non-sovereign	(185.0)	179.9	(5.1)	57.5	(0.6)	(192.6)	184.1	(8.5)	94.4	2.8

- 1 Represents credit protection purchased with identical underlyings and recoveries.
- 2 Based on internal ratings of BBB and above.
- 3 Includes synthetic securitized loan portfolios.

The following table reconciles the notional amount of credit derivatives included in the table "Fair value of derivative instruments" to the table "Credit protection sold/purchased".

Credit derivatives		
end of	2018	2017
Credit derivatives (CHF billion)		
Credit protection sold	201.6	213.9
Credit protection purchased	195.1	203.6
Other protection purchased	63.0	100.9
Other instruments ¹	9.7	6.5
Total credit derivatives	469.4	524.9

1 Consists of total return swaps and other derivative instruments.

Maturity of credit prot	ection sold	l		
end of	Maturity less than 1 year	Maturity between 1 to 5 years	Maturity greater than 5 years	Total
2018 (CHF billion)				
Single-name instruments	13.1	54.9	4.2	72.2
Multi-name instruments	28.8	80.6	20.0	129.4
Total instruments	41.9	135.5	24.2	201.6
2017 (CHF billion)				
Single-name instruments	21.6	59.4	4.8	85.8
Multi-name instruments	31.2	79.9	17.0	128.1
Total instruments	52.8	139.3	21.8	213.9

32 Guarantees and commitments

Guarantees

Total guarantees	26,732	10,025	2,792	1,865	41,414	40,233	506	8,448
Other guarantees	4,461	1,006	708	503	6,678	6,673	47	3,833
Derivatives ²	15,520	6,860	1,397	727	24,504	24,504	403	_3
Performance guarantees and similar instruments	4,931	1,639	373	200	7,143	6,216	44	3,012
Credit guarantees and similar instruments	1,820	520	314	435	3,089	2,840	12	1,603
2017 (CHF million)								
Total guarantees	29,156	7,183	2,666	1,937	40,942	39,914	1,033	9,074
Other guarantees	4,325	1,405	640	517	6,887	6,814	56	4,169
Derivatives ²	17,594	3,995	1,256	778	23,623	23,623	919	_3
Performance guarantees and similar instruments	5,008	1,344	552	240	7,144	6,278	44	3,153
Credit guarantees and similar instruments	2,229	439	218	402	3,288	3,199	14	1,752
2018 (CHF million)								
end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount ¹	Carrying value	Collateral received

- 1 Total net amount is computed as the gross amount less any participations.
- 2 Excludes derivative contracts with certain active commercial and investment banks and certain other counterparties, as such contracts can be cash settled and the Bank had no basis to conclude it was probable that the counterparties held, at inception, the underlying instruments.
- 3 Collateral for derivatives accounted for as guarantees is not significant.
- → Refer to "Note 33 Guarantees and commitments" in VI Consolidated financial statements Credit Suisse Group for further information.

Deposit-taking banks and securities dealers in Switzerland and certain other European countries are required to ensure the payout of privileged deposits in case of specified restrictions or compulsory liquidation of a deposit-taking bank. In Switzerland, deposit-taking banks and securities dealers jointly guarantee an amount of up to CHF 6 billion. Upon occurrence of a payout event triggered by a specified restriction of business imposed by the Swiss Financial Market Supervisory Authority FINMA (FINMA) or by the compulsory liquidation of another deposit-taking bank, the Bank's contribution will be calculated based on its share of privileged deposits in proportion to total privileged deposits. Based on FINMA's estimate for the Bank, the Bank's share in the deposit insurance guarantee program for the period July 1, 2018 to June 30, 2019 is CHF 0.5 billion. These deposit insurance guarantees were reflected in other guarantees.

Representations and warranties on residential mortgage loans sold

In connection with the Global Markets division's sale of US residential mortgage loans, the Bank has provided certain representations and warranties relating to the loans sold.

Lease commitments			
CHF million			
2019			427
2020			376
2021			262
2022			239
2023			198
Thereafter			1,292
Future operating lease commitments			2,794
Less minimum non-cancellable sublease rentals			436
Total net future minimum lease commitmen	its		2,358
Rental expense for operating lease	es		
in	2018	2017	2016
CHF million			
Minimum rental expense	446	528	550
Sublease rental income	(66)	(65)	(89)
Total net expenses for operating leases	380	463	461

Operating lease commitments

Sale-leaseback transactions

During 2018, we entered into one sale-leaseback transaction in respect of own property, which was recognized as an operating lease arrangement with a lease term of ten years. In 2017, we did not enter into any sale-leaseback transactions, and in 2016,

the Bank entered into several smaller sale-leaseback transactions in respect of own property, which were all recognized as operating lease arrangements with lease terms of two years. The total contractual rental expenses were CHF 5 million for the 2018 sale-leaseback transaction and CHF 19 million for the 2016 sale-leaseback transactions.

Other commitments							
end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount ¹	Collateral received
2018 (CHF million)							
Irrevocable commitments under documentary credits	5,056	182	0	0	5,238	5,077	3,651
Irrevocable loan commitments	26,882	34,188	45,938	9,065	116,073 ²	111,967	57,153
Forward reverse repurchase agreements	31	0	0	0	31	31	31
Other commitments	329	11	119	33	492	492	4
Total other commitments	32,298	34,381	46,057	9,098	121,834	117,567	60,839
2017 (CHF million)							
Irrevocable commitments under documentary credits	4,976	113	1	1	5,091	5,000	3,218
Irrevocable loan commitments	24,296	33,649	40,425	8,031	106,401 ²	101,270	42,307
Forward reverse repurchase agreements	12	0	0	0	12	12	12
Other commitments	219	13	11	104	347	347	0
Total other commitments	29,503	33,775	40,437	8,136	111,851	106,629	45,537

¹ Total net amount is computed as the gross amount less any participations.

² Irrevocable loan commitments do not include a total gross amount of CHF 113,593 million and CHF 108,665 million of unused credit limits as of December 31, 2018 and 2017, respectively, which were revocable at the Bank's sole discretion upon notice to the client.

33 Transfers of financial assets and variable interest entities

Transfers of financial assets

→ Refer to "Note 34 – Transfers of financial assets and variable interest entities" in VI – Credit Suisse Group – Consolidated financial statements for further information.

Securitizations

The following table provides the gains or losses and proceeds from the transfer of assets relating to 2018, 2017 and 2016 securitizations of financial assets that qualify for sale accounting and subsequent derecognition, along with the cash flows between the Bank and the SPEs used in any securitizations in which the Bank still has continuing involvement, regardless of when the securitization occurred.

Securitizations			
in	2018	2017	2016
Gains/(losses) and cash flows (CHF millio	on)		
CMBS			
Net gain/(loss) 1	10	37	(2)
Proceeds from transfer of assets	5,861	6,604	3,954
Cash received on interests that continue to be held	41	28	69
RMBS			
Net gain/(loss) 1	(1)	0	(4)
Proceeds from transfer of assets	22,536	14,817	9,866
Purchases of previously transferred financial assets or its underlying collateral	0	(2)	0
Servicing fees	3	3	2
Cash received on interests that continue to be held	576	368	529
Other asset-backed financings			
Net gain ¹	77	31	26
Proceeds from transfer of assets	6,422	7,664	2,813
Purchases of previously transferred financial assets or its underlying collateral ²	(318)	(380)	(68)
Fees ³	142	135	137
Cash received on interests that continue to be held	3	4	2

- 1 Includes underwriting revenues, deferred origination fees, gains or losses on the sale of collateral to the SPE and gains or losses on the sale of newly issued securities to third parties, but excludes net interest income on assets prior to the securitization. The gains or losses on the sale of the collateral is the difference between the fair value on the day prior to the securitization pricing date and the sale price of the loans.
- 2 Line item was omitted in 2017 and 2016.
- 3 Represents management fees and performance fees earned for investment management services provided to managed CLOs.

Continuing involvement in transferred financial assets

The following table provides the outstanding principal balance of assets to which the Bank continued to be exposed after the transfer of the financial assets to any SPE and the total assets of the SPE as of December 31, 2018 and 2017, regardless of when the transfer of assets occurred.

Principal amounts outstanding and total assets of SPEs resulting from continuing involvement

-		
end of	2018	2017
CHF million		
CMBS		
Principal amount outstanding	25,330	19,918
Total assets of SPE	35,760	31,586
RMBS		
Principal amount outstanding	40,253	35,645
Total assets of SPE	41,242	36,770
Other asset-backed financings		
Principal amount outstanding	23,036	20,916
Total assets of SPE	47,542	39,330

Principal amount outstanding relates to assets transferred from the Bank and does not include principle amounts for assets transferred from third parties.

Fair value of beneficial interests

The fair value measurement of beneficial interests held at the time of transfer and as of the reporting date that result from any continuing involvement is determined using fair value estimation techniques, such as the present value of estimated future cash flows that incorporate assumptions that market participants customarily use in these valuation techniques. The fair value of the assets or liabilities that result from any continuing involvement does not include any benefits from financial instruments that the Bank may utilize to hedge the inherent risks.

Key economic assumptions at the time of transfer

→ Refer to "Note 34 – Financial instruments" for further information on the fair value hierarchy.

Key economic assumptions used in measuring fair value of beneficial interests at time of transfer 2018 2017 2016 at time of transfer, in CMBS **RMBS** CMBS **RMBS** CMBS **RMBS** CHF million, except where indicated Fair value of beneficial interests 662 3.613 445 2.400 69 2,068 of which level 2 640 3.509 444 2.221 69 1,827 0 of which level 3 22 103 179 241 7.8 10.0 6.0 8.4 7.2 Weighted-average life, in years 2 Prepayment speed assumption (rate per annum), in % 1 5.0-13.5 1.0-22.9 5.0-33.0 Cash flow discount rate (rate per annum), in % 3 3.6-9.8 3.0-13.6 2.4-9.0 2.0-29.5 2.4-4.9 1.2-24.4 Expected credit losses (rate per annum), in % 4 1.8 - 3.12.3-7.2 0.6 - 3.40.8 - 6.30.0 - 0.02.5 - 11.2

Transfers of assets in which the Bank does not have beneficial interests are not included in this table.

- 2 To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.
- 3 The rate was based on the weighted-average yield on the beneficial interests.
- 4 The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.

Key economic assumptions as of the reporting date

The following table provides the sensitivity analysis of key economic assumptions used in measuring the fair value of beneficial interests held in SPEs as of December 31, 2018 and 2017.

-	Key economi	ic assumption	is used in n	neasuring f	air value of	beneficial	interests held in S	PEs

			2018			2017
end of	CMBS ¹	RMBS	Other asset- backed financing activities ²	CMBS 1	RMBS	Other asset- backed financing activities ²
CHF million, except where indicated						
Fair value of beneficial interests	805	2,006	226	579	1,985	665
of which non-investment grade	112	307	26	100	508	50
Weighted-average life, in years	5.7	7.9	5.6	4.7	8.1	6.4
Prepayment speed assumption (rate per annum), in % ³	-	2.0-20.0	_	_	1.0-25.0	_
Impact on fair value from 10% adverse change		(22.3)			(35.0)	
Impact on fair value from 20% adverse change	_	(43.2)			(68.1)	
Cash flow discount rate (rate per annum), in % 4	3.4–14.3	3.0-21.3	1.0-21.2	2.7-12.3	1.9–30.6	1.0-21.2
Impact on fair value from 10% adverse change	(20.7)	(52.1)	(2.9)	(8.8)	(49.2)	(12.4)
Impact on fair value from 20% adverse change	(37.6)	(101.3)	(5.7)	(17.0)	(95.3)	(24.5)
Expected credit losses (rate per annum), in % 5	0.8–4.7	0.6-18.8	1.0-21.2	0.6–6.3	0.5-28.2	0.7–21.2
Impact on fair value from 10% adverse change	(10.2)	(23.8)	(2.4)	(3.9)	(23.6)	(6.6)
Impact on fair value from 20% adverse change	(17.3)	(46.7)	(4.8)	(7.8)	(46.1)	(12.9)

- 1 To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.
- 2 CDOs within this category are generally structured to be protected from prepayment risk.
- 3 PSA is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the CPR assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.
- 4 The rate was based on the weighted-average yield on the beneficial interests.
- 5 The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.

¹ Prepayment speed assumption (PSA) is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the constant prepayment rate (CPR) assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

Transfers of financial assets where sale treatment was not achieved

The following table provides the carrying amounts of transferred financial assets and the related liabilities where sale treatment was not achieved as of December 31, 2018 and 2017.

Carrying amounts of transferred financial assets and liabilities where sale treatment was not achieved

end of	2018	2017
CHF million		
Other asset-backed financings		
Trading assets	255	347
Other assets	0	48
Liability to SPE, included in other liabilities	(255)	(395)

Securities sold under repurchase agreements and securities lending transactions accounted for as secured borrowings

The following tables provide the gross obligation relating to securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral by the class of collateral pledged and by remaining contractual maturity as of December 31, 2018 and 2017.

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by class of collateral pledged

end of	2018	2017
CHF billion		
Government debt securities	31.1	31.4
Corporate debt securities	9.6	15.1
Asset-backed securities	1.8	5.0
Other	0.2	0.6
Securities sold under repurchase agreements	42.7	52.1
Government debt securities	1.4	2.7
Corporate debt securities	0.2	0.4
Equity securities	3.2	4.8
Other	0.2	0.3
Securities lending transactions	5.0	8.2
Government debt securities	3.6	1.8
Corporate debt securities	1.0	0.6
Asset-backed securities	0.1	0.0
Equity securities	37.0	35.6
Other	0.0	0.1
Obligation to return securities received		
as collateral, at fair value	41.7	38.1
Total	89.4	98.4

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by remaining contractual maturity

		Remaini	ing contracti	ual maturities	
end of	On demand ¹	Up to 30 days ²	31-90 days	More than 90 days	Total
2018 (CHF billion)					
Securities sold under repurchase agreements	7.4	26.3	6.7	2.3	42.7
Securities lending transactions	4.1	0.9	0.0	0.0	5.0
Obligation to return securities received as collateral, at fair value	41.4	0.1	0.2	0.0	41.7
Total	52.9	27.3	6.9	2.3	89.4
2017 (CHF billion)					
Securities sold under repurchase agreements	7.2	32.5	5.2	7.2	52.1
Securities lending transactions	5.7	2.2	0.0	0.3	8.2
Obligation to return securities received as collateral, at fair value	37.9	0.0	0.0	0.2	38.1
Total	50.8	34.7	5.2	7.7	98.4

- 1 Includes contracts with no contractual maturity that may contain termination arrangements subject to a notice period.
- ${\bf 2} \ {\sf Includes} \ {\sf overnight} \ {\sf transactions}.$
- → Refer to "Note 26 Offsetting of financial assets and financial liabilities" for further information on the gross amount of securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral and the net amounts disclosed in the consolidated balance sheets.

Variable interest entities

→ Refer to "Note 34 – Transfers of financial assets and variable interest entities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Commercial paper conduit

The Bank acts as the administrator and provider of liquidity and credit enhancement facilities for Alpine Securitization Ltd (Alpine), a multi-seller asset-backed CP conduit used for client and Bank financing purposes. Alpine discloses to CP investors certain portfolio and asset data and submits its portfolio to rating agencies for public ratings. This CP conduit purchases assets such as loans and receivables or enters into reverse repurchase agreements and finances such activities through the issuance of CP backed by these assets. The CP conduit can enter into liquidity facilities with third-party entities pursuant to which it may be required to purchase assets from these entities to provide them with liquidity and credit support. The financing transactions are structured to provide credit support to the CP conduit in the form of over-collateralization and other asset-specific enhancements. Alpine is a separate legal entity that is wholly owned by the Bank. However, its assets are available to satisfy only the claims of its creditors. In addition, the Bank, as administrator and liquidity facility provider, has significant exposure to and power over

the activities of Alpine. Alpine is considered a VIE for accounting purposes and the Bank is deemed the primary beneficiary and consolidates this entity.

The overall average maturity of Alpine's outstanding CP was approximately 129 days as of December 31, 2018. Alpine was rated A-1(sf) by Standard & Poor's and P-1(sf) by Moody's and had exposures mainly in a reverse repurchase agreement with a Bank entity, consumer loans and car loans.

The Bank's commitment to this CP conduit consists of obligations under liquidity agreements. The liquidity agreements are asset-specific arrangements, which require the Bank to provide short-term financing to the CP conduit or to purchase assets from the CP conduit in certain circumstances, including a lack of liquidity in the CP market such that the CP conduit cannot refinance its obligations or, in some cases, a default of an underlying asset. The asset-specific credit enhancements provided by the client seller of the assets remain unchanged as a result of such a purchase. In entering into such agreements, the Bank reviews the credit risk associated with these transactions on the same basis that would apply to other extensions of credit.

The Bank's economic risks associated with the CP conduit are included in the Bank's risk management framework including counterparty, economic risk capital and scenario analysis.

Consolidated VIEs

The Bank has significant involvement with VIEs in its role as a financial intermediary on behalf of clients. The Bank consolidated all VIEs related to financial intermediation for which it was the primary beneficiary.

Consolidated VIEs in which the Bank was the	ne primary beneficiary						
					Financial inte	ermediation	
end of	CDO/ CLO	CP Conduit	Securi- tizations	Funds	Loans	Other	Total
	CLO	Conduit	lizations	1 unus	LUAIIS	Other	IOIAI
2018 (CHF million)							
Cash and due from banks	15	1	68	17	52	20	173
Trading assets	72	0	170	418	944	12	1,616
Investment securities	0	0	1,432	0	0	0	1,432
Other investments	0	0	0	153	1,073	279	1,505
Net loans	0	0	119	0	23	245	387
Premises and equipment	0	0	0	0	18	0	18
Other assets	57	16	863	4	32	1,037	2,009
of which loans held-for-sale	57	0	107	0	3	0	167
Total assets of consolidated VIEs	144	17	2,652	592	2,142	1,593	7,140
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	5,465	0	0	0	0	5,465
Long-term debt	48	0	1,487	174	26	29	1,764
Other liabilities	0	43	1	8	98	127	277
Total liabilities of consolidated VIEs	48	5,508	1,488	182	127	156	7,509
2017 (CHF million)							
Cash and due from banks	22	0	96	32	70	12	232
Trading assets	17	0	10	179	1,122	20	1,348
Investment securities	0	0	381	0	0	0	381
Other investments	0	0	0	350	1,197	286	1,833
Net loans	0	0	0	3	21	243	267
Premises and equipment	0	0	0	0	128	0	128
Other assets	83	4	1,070	21	31	1,187	2,396
of which loans held-for-sale	83	0	152	0	3	0	238
Total assets of consolidated VIEs	122	4	1,557	585	2,569	1,748	6,585
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	6,672 ¹	0	0	0	0	6,672
Long-term debt	51	0	752	0	26	34	863
Other liabilities	0	237 ¹	1	26	111	66	441

6,909

753

7,979

140

Total liabilities of consolidated VIEs

 $[\]ensuremath{\mathbf{1}}$ Amounts were omitted in prior periods and have been corrected.

Non-consolidated VIEs

Total assets of non-consolidated VIEs are the assets of the non-consolidated VIEs themselves and are typically unrelated to the exposures the Bank has with these entities due to variable interests held by third-party investors. Accordingly, these amounts are not considered for risk management purposes.

Non-consolidated VIEs						
				Financial inte	ermediation	
	CDO/	Securi-			0.11	
end of	CLO	tizations	Funds	Loans	Other	Total
2018 (CHF million)						
Trading assets	209	4,527	927	183	3,703	9,549
Net loans	154	1,475	1,591	5,246	430	8,896
Other assets	3	19	112	0	444	578
Total variable interest assets	366	6,021	2,630	5,429	4,577	19,023
Maximum exposure to loss	366	7,637	2,645	8,680	5,150	24,478
Total assets of non-consolidated VIEs	7,033	96,483	65,848	20,804	8,784	198,952
2017 (CHF million)						
Trading assets	746	4,573	1,014	224	2,388	8,945
Net loans	620	1,563	2,438	4,591	328	9,540
Other assets	9	11	55	1	437	513
Total variable interest assets	1,375	6,147	3,507	4,816	3,153	18,998
Maximum exposure to loss	1,375	7,617	3,514	7,061	4,079	23,646
Total assets of non-consolidated VIEs	15,874	64,839	63,504	16,270	6,265	166,752

34 Financial instruments

→ Refer to "Note 35 – Financial instruments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Assets and liabilities measured at fair value on a recurring basis

end of 2018	Level 1	Level 2	Level 3	Netting impact ¹	Assets measured at net asset value per share ²	Total
Assets (CHF million)					P	
Cash and due from banks	0	115	0	_	_	115
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	81,818	0	_	_	81,818
Securities received as collateral	37,962	3,704	30	_	_	41,696
Trading assets	76,178	156,239	8,814	(109,930)	1,126	132,427
of which debt securities	23,726	36,402	2,076		12	62,216
of which foreign government	23,547	4,542	232		_	28,321
of which corporates	66	8,065	1,260		12	9,403
of which RMBS	0	19,652	269		_	19,921
of which equity securities	42,812	2,459	132		1,114	46,517
of which derivatives	8,000	117,034	3,298	(109,930)	_	18,402
of which interest rate products	3,557	65,823	507		_	-
of which foreign exchange products	25	27,526	258			
of which equity/index-related products	4,415	18,059	1,054			
of which credit derivatives	0	4,739	673		_	
of which other derivatives	2	633	806			
of which other trading assets	1,640	344	3,308			5,292
Investment securities	0	2,743	166	-	-	2,909
Other investments	14	7	1,309	_	1,100	2,430
of which life finance instruments	0	0	1,067	-	-	1,067
Loans	0	10,549	4,324	-	-	14,873
of which real estate	0	146	515			661
of which commercial and industrial loans	0	3,976	1,949			5,925
of which financial institutions	0	4,164	1,391			5,555
Other intangible assets (mortgage servicing rights)	0	0	163	-	_	163
Other assets	117	5,807	1,543	(204)		7,263
of which loans held-for-sale	0	4,238	1,235			5,473
Total assets at fair value	114,271	260,982	16,349	(110,134)	2,226	283,694

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

					Liabilities measured	
				Nattina	at net asset value	
end of 2018	Level 1	Level 2	Level 3	Netting impact ¹	per share 2	Total
Liabilities (CHF million)						
Due to banks	0	406	0	-	-	406
Customer deposits	0	2,839	453	-	-	3,292
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	14,828	0	_	_	14,828
Obligation to return securities received as collateral	37,962	3,704	30	_	_	41,696
Trading liabilities	31,940	123,737	3,589	(117,105)	10	42,171
of which debt securities	4,462	3,511	25			7,998
of which foreign government	4,328	255	0			4,583
of which equity securities	18,785	118	37		10	18,950
of which derivatives	8,693	120,108	3,527	(117,105)		15,223
of which interest rate products	3,699	62,573	189			
of which foreign exchange products	32	31,983	160			
of which equity/index-related products	4,961	19,788	1,500			
of which credit derivatives	0	5,485	1,140			
Short-term borrowings	0	7,284	784	_	-	8,068
Long-term debt	0	50,356	12,671	-	-	63,027
of which structured notes over one year and up to two years	0	7,242	528			7,770
of which structured notes over two years	0	28,215	11,800			40,015
Other liabilities	0	7,877	1,327	(221)	-	8,983
Total liabilities at fair value	69,902	211,031	18,854	(117,326)	10	182,471

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2017	Level 1	Level 2	Level 3	Netting impact ¹	Assets measured at net asset value per share ²	Total
					F	
Assets (CHF million) Cash and due from banks	0	212	0			212
	0	212				212
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	77,498	0	-	_	77,498
Securities received as collateral	36,697	1,331	46	-	_	38,074
of which debt securities	576	802	0		_	1,378
of which corporates	0	726	0			726
of which equity securities	36,121	529	46		-	36,696
Trading assets	87,452	188,122	8,754	(128,607)	1,053	156,774
of which debt securities	29,827	40,707	2,292			72,826
of which foreign governments	29,561	4,256	270		-	34,087
of which corporates	179	10,292	1,412		-	11,883
of which RMBS	0	21,399	320		_	21,719
of which CMBS	0	2,501	16			2,517
of which CDO	0	2,255	126		-	2,381
of which equity securities	51,125	3,481	163		1,053	55,822
of which derivatives	3,577	141,641	3,289	(128,607)		19,900
of which interest rate products	1,219	84,932	801		-	-
of which foreign exchange products	19	30,302	188	_	_	_
of which equity/index-related products	2,339	18,544	833			-
of which credit derivatives	0	7,107	634			
Other trading assets	2,923	2,293	3,010			8,226
Investment securities	250	1,897	42	-	-	2,189
of which debt securities	244	1,778	42	-		2,064
of which foreign governments	98	1,138	0	-	-	1,236
of which corporates	0	238	0			238
of which RMBS	0	167	40			207
of which CMBS	0	171	2	-	-	173
of which equity securities	6	119	0	_	_	125
Other investments	25	16	1,601		1,855	3,497
of which private equity	0	0	29	-	343	372
of which equity funds	0	0	22	_	133	155
of which hedge funds	0	0	0	-	391	391
of which debt funds	0	0	0		239	239
of which other equity investments	25	9	271	_	1,121	1,426
of which private	18	9	271		1,121	1,419
of which life finance instruments	0	7	1,301	_	_	1,308
Loans	0	10,777	4,530	_	-	15,307
of which commercial and industrial loans	0	3,437	2,207		. .	5,644
of which financial institutions	0	4,890	1,480			6,370
Other intangible assets (mortgage servicing rights)	0	0	158	_	-	158
Other assets	101	7,570	1,511	(164)		9,018
of which loans held-for-sale	0	5,800	1,350			7,150
Total assets at fair value	124,525	287,423	16,642	(128,771)	2,908	302,727

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2017	Level 1	Level 2	Level 3	Netting impact ¹	Liabilities measured at net asset value per share ²	Total
Liabilities (CHF million)						
Due to banks	0	197	0	_	_	197
Customer deposits	0	3,056	455	_	-	3,511
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	15,262	0	_	_	15,262
Obligation to return securities received as collateral	36,697	1,331	46	_	_	38,074
of which debt securities	576	802	0		-	1,378
of which corporates	0	726	0		_	726
of which equity securities	36,121	529	46		_	36,696
Trading liabilities	23,121	149,951	3,226	(137,175)	9	39,132
of which debt securities	5,160	4,139	2		-	9,301
of which foreign governments	5,108	746	0		_	5,854
of which corporates	12	3,334	2		_	3,348
of which equity securities	14,230	883	55		9	15,177
of which derivatives	3,731	144,929	3,169	(137,175)	_	14,654
of which interest rate products	1,254	80,290	317		_	
of which foreign exchange products	8	35,707	100			
of which equity/index-related products	2,468	20,017	1,301		_	
of which credit derivatives	0	7,982	898		_	
Short-term borrowings	0	10,174	845	_	-	11,019
Long-term debt	0	50,121	12,501	_	-	62,622
of which treasury debt over two years	0	936	0	_	-	936
of which structured notes over one year and up to two years	0	6,216	149		-	6,365
of which structured notes over two years	0	32,782	12,259	-	-	45,041
of which other debt instruments over two years	0	2,221	61	_	-	2,282
of which other subordinated bonds	0	4,557	0		-	4,557
of which non-recourse liabilities	0	833	30			863
Other liabilities	0	7,356	1,467	(233)	_	8,590
of which failed sales	0	439	223			662
Total liabilities at fair value	59,818	237,448	18,540	(137,408)	9	178,407

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis for level 3

	Balance at beginning	Transfers	Transfers				
2018	of period	in	out	Purchases	Sales	Issuances	
Assets (CHF million)							
Securities received as collateral	46	0	(15)	102	(103)	0	
Trading assets	8,754	1,563	(1,602)	40,057	(40,138)	1,394	
of which debt securities	2,292	802	(904)	3,301	(3,261)	0	
of which foreign governments	270	21	(12)	45	(67)	0	
of which corporates	1,412	491	(593)	2,582	(2,583)	0	
of which RMBS	320	211	(225)	370	(333)	0	
of which equity securities	163	132	(95)	51	(185)	0	
of which derivatives	3,289	510	(525)	0	0	1,394	
of which interest rate products	801	18	(66)	0	0	100	
of which foreign exchange derivatives	188	3	(2)	0	0	14	
of which equity/index-related products	833	329	(317)	0	0	447	
of which credit derivatives	634	160	(141)	0	0	505	
of which other derivatives	833	0	1	0	0	328	
of which other trading assets	3,010	119	(78)	36,705	(36,692)	0	
Investment securities	42	8	(121)	281	(28)	0	
Other investments	1,601	79	(102)	228	(405)	0	
of which life finance instruments	1,301	0	0	151	(299)	0	
Loans	4,530	934	(393)	163	(491)	1,563	
of which real estate	171	196	(81)	0	0	307	
of which commercial and industrial loans	2,207	348	(29)	1	(226)	783	
of which financial institutions	1,480	335	(53)	150	(133)	332	
Other intangible assets (mortgage servicing rights)	158	0	0	1	0	0	
Other assets	1,511	288	(191)	1,610	(1,357)	300	
of which loans held-for-sale	1,350	243	(166)	1,447	(1,310)	300	
Total assets at fair value	16,642	2,872	(2,424)	42,442	(42,522)	3,257	
Liabilities (CHF million)							
Customer deposits	455	0	0	0	0	0	
Obligation to return securities received as collateral	46	0	(15)	102	(103)	0	
Trading liabilities	3,226	768	(641)	127	(107)	2,573	
of which debt securities	2	30	(24)	39	(23)	0	
of which equity securities	55	19	(5)	87	(80)	0	
of which derivatives	3,169	719	(612)	1	(4)	2,573	
of which interest rate derivatives	317	25	(11)	0	0	156	
of which foreign exchange derivatives	100	19	(1)	0	0	55	
of which equity/index-related derivatives	1,301	429	(364)	0	0	1,306	
of which credit derivatives	898	247	(235)	0	0	806	
Short-term borrowings	845	335	(242)	0	0	1,090	
Long-term debt	12,501	2,873	(3,108)	0	0	5,761	
of which structured notes over one year and up to two years	149	452	(296)	0	0	745	
of which structured notes over two years	12,259	2,368	(2,800)	0	0	4,761	
Other liabilities	1,467	117	(29)	45	(128)	20	
Total liabilities at fair value	18,540	4,093	(4,035)	274	(338)	9,444	
Net assets/(liabilities) at fair value	(1,898)	(1,221)	1,611	42,168	(42,184)	(6,187)	

		nulated other nsive income		her revenues	Ot	ading revenues	Tra	
Balance at end of period	Foreign currency translation impact	On all other	On transfers in / out	On all other	On transfers in / out	On all other	On transfers in / out	Settlements
30	0	0	0	0	0	0	0	0
8,814	(19)	0	0	0	0	303	(21)	(1,477)
2,076	(26)	0	0	(3)	0	(150)	25	0
232	(29)	0	0	0	0	4	0	0
1,260	(4)	0	0	(4)	0	(72)	31	0
269	3	0	0	0	0	(74)	(3)	0
132	0	0	0	3	0	55	8	0
3,298	(24)	0	0	0	0	144	(56)	(1,434)
507	(10)	0	0	0	0	(237)	17	(116)
258	2	0	0	0	0	79	(2)	(24)
1,054	(25)	0	0	0	0	300	(77)	(436)
673	7	0	0	0	0	(59)	5	(438)
806	2	0	0	0	0	61	1	(420)
3,308	31	0	0	0	0	254	2	(43)
166	4	0	0	0	0	185	0	(205)
1,309	(4)	0	0	5	0	(93)	0	0
1,067	10	0	0	0	0	(96)	0	0
4,324	24	0	0	(13)	0	(134)	7	(1,866)
515	0	0	0	(8)	0	(8)	2	(64)
1,949	10	0	0	(5)	0	(83)	0	(1,057)
1,391	8	0	0	0	0	8	10	(746)
163	3	0	0	1	0	0	0	0
1,543	(67)	0	0	(1)	0	(32)	22	(540)
1,235	(67)	0	0	0	0	(44)	21	(539)
16,349	(59)	0	0	(8)	0	229	8	(4,088)
453	(13)	(21)	0	0	0	32	0	0
30	0	0	0	0	0	0	0	0
3,589	19	0	0	(3)	0	(839)	(7)	(1,527)
25	0	0	0	0	0	1	0	0
37	0	0	0	(3)	0	(33)	(3)	0
3,527	19	0	0	0	0	(807)	(4)	(1,527)
189	2	0	0	0	0	(171)	16	(145)
160	1	0	0	0	0	15	0	(29)
1,500	4	0	0	0	0	(592)	(36)	(548)
1,140	10	0	0	0	0	(30)	16	(572)
784	7	0	0	(4)	0	(117)	3	(1,133)
12,671	125	(417)	(2)	0	0	(1,381)	(25)	(3,656)
528	3	0	0	0	0	(14)	(10)	(501)
11,800	118	(417)	(2)	0	0	(1,355)	(17)	(3,115)
1,327	6	0	0	159	0	94	(7)	(417)
18,854	144	(438)	(2)	152	0	(2,211)	(36)	(6,733)
(2,505)	(203)	438	2	(160)	0	2,440	44	2,645

Assets and liabilities measured at fair value on a recurring basis for level 3 (continued)

2047	Balance at beginning	Transfers	Transfers				
2017	of period	in	out	Purchases	Sales	Issuances	
Assets (CHF million)	1	40			(41)	0	
Interest-bearing deposits with banks Central bank funds sold, securities purchased under	ı	40	0	0	(41)	0	
resale agreements and securities borrowing transactions	174	0	0	0	0	26	
Securities received as collateral	70	3	(1)	65	(86)	0	
Trading assets	12,765	1,159	(2,046)	15,810	(18,032)	1,317	
of which debt securities	3,977	608	(1,074)	2,747	(3,705)	0	
of which corporates	1,674	276	(654)	2,203	(2,005)	0	
of which RMBS	605	280	(229)	85	(305)	0	
of which CMBS	65	6	(17)	2	(13)	0	
of which CDO	1,165	39	(157)	174	(1,047)	0	
of which equity securities	240	49	(35)	146	(260)	0	
of which derivatives	4,305	416	(839)	0	0	1,317	
of which interest rate products	748	56	(53)	0	0	118	
of which equity/index-related products	914	142	(98)	0	0	443	
of which credit derivatives	688	216	(252)	0	0	381	
of which other trading assets	4,243	86	(98)	12,917	(14,067)	0	
Investment securities	72	0	(17)	100	(113)	0	
Other investments	1,906	23	(22)	324	(562)	0	
of which equity	318	23	(22)	139	(144)	0	
of which life finance instruments	1,588	0	0	185	(418)	0	
Loans	6,585	1,130	(947)	106	(580)	1,151	
of which commercial and industrial loans	3,816	448	(482)	71	(395)	590	
of which financial institutions	1,829	352	(126)	33	(176)	444	
Other intangible assets (mortgage servicing rights)	138	0	0	23	(1)	0	
Other assets	1,679	347	(132)	759	(1,056)	1,054	
of which loans held-for-sale	1,316	286	(113)	667	(904)	1,053	
Total assets at fair value	23,390	2,702	(3,165)	17,187	(20,471)	3,548	
Liabilities (CHF million)							
Customer deposits	410	0	0	0	0	35	
Obligation to return securities received as collateral	70	3	(1)	65	(86)	0	
Trading liabilities	3,737	566	(1,049)	113	(134)	1,193	
of which interest rate derivatives	538	57	(36)	0	0	45	
of which foreign exchange derivatives	150	11	(1)	0	0	9	
of which equity/index-related derivatives	1,181	54	(188)	0	0	543	
of which credit derivatives	851	377	(392)	0	0	350	
Short-term borrowings	516	95	(172)	0	0	865	
Long-term debt	13,415	1,172	(3,004)	0	0	4,540	
of which structured notes over two years	12,434	995	(2,886)	0	0	3,913	
Other liabilities	1,679	150	(102)	211	(304)	7	
of which failed sales	219	80	(70)	189	(218)	0	
Total liabilities at fair value	19,827	1,986	(4,328)	389	(524)	6,640	
Net assets/(liabilities) at fair value	3,563	716	1,163	16,798	(19,947)	(3,092)	

	Too die a variance -			Other reviews		mulated other		
	In	ading revenues	0	ther revenues	comprehe	ensive income		
	On	On	On	On	On	On	Foreign currency	Balance
	transfers	all	transfers	all	transfers	all	translation	at end
Settlements	in / out	other	in / out	other	in / out	other	impact	of period
0	0	0	0	0	0	0	0	0
(102)	0	0	0	0	0	0	(7)	0
(193)	0	0	0	0	0	0	(7)	0 46
(2,068)	121	252	6	1	0	0	(531)	8,754
0	(4)	(80)	6	1	0	0	(184)	2,292
0	(4)	14	6	0	0	0	(98)	1,412
0	3	(95)	0	0	0	0	(24)	320
0	(3)	(21)	0	0	0	0	(3)	16
0	0	(16)	0	0	0	0	(32)	126
0	0	33	0	0	0	0	(10)	163
(1,817)	123	(63)	0	0	0	0	(153)	3,289
(183)	6	104	0	0	0	0	5	801
(597)	14	58	0	0	0	0	(43)	833
(297)	38	(110)	0	0	0	0	(30)	634
(251)	2	362	0	0	0	0	(184)	3,010
(90)	(1)	95	0	0	0	0	(4)	42
0	0	9	0	9	0	0	(86)	1,601
0	0	(7)	0	9	0	0	(16)	300
0	0	16	0	0	0	0	(70)	1,301
(2,743)	15	85	0	0	0	0	(272)	4,530
(1,705)	(2)	21	0	0	0	0	(155)	2,207
(821)	28	(6)	0	0	0	0	(77)	1,480
0	0	0	0	4	0	0	(6)	158
(885)	(1)	(172)	0	(4)	0	0	(78)	1,511
(885)	(2)	0	0	(4)	0	0	(64)	1,350
(5,979)	134	269	6	10	0	0	(989)	16,642
(3)	0	(61)	0	0	0	42	32	455
0	0	0	0	0	0	0	(5)	46
(1,625)	140	461	0	(9)	0	0	(167)	3,226
(258)	6	(14)	0	0	0	0	(21)	317
(12)	0	(52)	0	0	0	0	(5)	100
(692)	17	441		0	0	0	(55)	1,301
(376)	61	66	0	0	0	0	(39)	898
(472)	(2)	19	4	10	0	6	(24)	845
(4,479)	(12)	1,400	0	0	88	21	(640)	12,501
(3,079)	(14)	1,390	0	0	87	17	(598)	12,259
(398)	(25)	(8)	0	327	0		(70)	1,467
0	(7)	40	0	0	0	0	(10)	223
(6,977)	101	1,811	4	328	88	69	(874)	18,540
998	33	(1,542)	2	(318)	(88)	(69)	(115)	(1,898)

Gains and losses on assets and liabilities measured at fa	ir value on a recur	ring basis	(level 3)					
		2018			2017			
in	Trading revenues	Other revenues	Total revenues	Trading revenues	Other revenues	Total revenues		
Gains and losses on assets and liabilities (CHF million)								
Net realized/unrealized gains/(losses) included in net revenues	2,484	(160)	2,324 ¹	(1,509)	(316)	(1,825)		
Whereof:								
Unrealized gains/(losses) relating to assets and liabilities still held as of the reporting date	(35)	(6)	(41)	(2,088)	20	(2,068)		

¹ Excludes net realized/unrealized gains/(losses) attributable to foreign currency translation impact.

		Valuation	Unobservable	Minimum	Maximum	Weighted
end of 2018	Fair value	technique	input	value	value	average
CHF million, except where indicated						
Securities received as collateral	30	-	-	_	-	_
Trading assets	8,814					
of which debt securities	2,076					
of which foreign governments	232	Discounted cash flow	Credit spread, in bp	140	140	140
of which corporates	1,260					
of which	441	Market comparable	Price, in %	0	118	94
of which	621	Option model	Correlation, in %	(60)	98	68
			Volatility, in %	0	178	30
of which RMBS	269	Discounted cash flow	Default rate, in %	0	11	3
			Discount rate, in %	1	26	7
			Loss severity, in %	0	100	63
			Prepayment rate, in %	1	22	8
of which equity securities	132					
of which	76	Market comparable	EBITDA multiple	2	9	6
			Price, in %	100	100	100
of which	49	Vendor price	Price, in actuals	0	355	1
of which derivatives	3,298					
of which interest rate products	507	Option model	Correlation, in %	0	100	69
			Prepayment rate, in %	1	26	9
			Volatility skew, in %	(4)	0	(2)
of which foreign exchange products	258					
of which	28	Discounted cash flow	Contingent probability, in %	95	95	95
of which	218	Option model	Correlation, in %	(23)	70	24
			Prepayment rate, in %	21	26	23
			Volatility, in %	80	90	85
of which equity/index-related products	1,054	Option model	Buyback probability, in %	50	100	74
			Correlation, in %	(40)	98	80
			Gap risk, in % ²	0	4	1
			Volatility, in %	2	178	34
of which credit derivatives	673	Discounted cash flow	Correlation, in %	97	97	97
			Credit spread, in bp	3	2,147	269
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	15
			Loss severity, in %	16	85	56
			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	68	8
of which other derivatives	806	Discounted cash flow	Market implied life expectancy, in years	2	16	5
			Mortality rate, in %	87	106	101
of which other trading assets	3,308					
of which	870	Discounted cash flow	Market implied life expectancy, in years	3	17	7
of which of which	2,119 249	Market comparable Option model	Price, in % Mortality rate, in %	0	110 70	30

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

Quantitative information about level 3	assets at fa	ir value (continued)				
end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average
CHF million, except where indicated						
Investment securities	166	_	_	_	_	_
Other investments	1,309					
of which life finance instruments	1,067	Discounted cash flow	Market implied life expectancy, in years	2	17	6
Loans	4,324					
of which real estate	515	Discounted cash flow	Credit spread, in bp	200	1,522	612
			Recovery rate, in %	25	40	39
of which commercial and industrial loans	1,949					
of which	1,531	Discounted cash flow	Credit spread, in bp	159	1,184	582
of which	306	Market comparable	Price, in %	0	99	65
of which financial institutions	1,391					
of which	1,157	Discounted cash flow	Credit spread, in bp	88	1,071	596
of which	73	Market comparable	Price, in %	1	100	74
Other intangible assets (mortgage servicing rights)	163	_	_	_	_	_
Other assets	1,543					
of which loans held-for-sale	1,235					
of which	422	Discounted cash flow	Credit spread, in bp	105	2,730	394
			Recovery rate, in %	25	87	56
of which	739	Market comparable	Price, in %	0	130	82
Total level 3 assets at fair value	16,349					

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

		Valuation	Unobservable	Minimum	Maximum	Weighted
end of 2017	Fair value	technique	input	value	value	average
CHF million, except where indicated						
Securities received as collateral	46	-	-	_	_	-
Trading assets	8,754					
of which debt securities	2,292					
of which corporates	1,412					
of which	387	Option model	Correlation, in %	(60)	98	55
of which	545	Market comparable	Price, in %	0	139	84
of which	444	Discounted cash flow	Credit spread, in bp	37	952	230
of which RMBS	320	Discounted cash flow	Discount rate, in %	1	24	11
			Prepayment rate, in %	1	36	10
			Default rate, in %	0	12	4
			Loss severity, in %	0	100	57
of which CMBS	16	Discounted cash flow	Capitalization rate, in %	14	14	14
			Discount rate, in %	8	16	14
			Prepayment rate, in %	0	5	4
of which CDO	126	Discounted cash flow	Discount rate, in %	5	13	8
			Prepayment rate, in %	5	20	13
			Credit spread, in bp	464	669	553
			Default rate, in %	2	5	3
			Loss severity, in %	0	80	34
of which equity securities	163					
of which	67	Vendor price	Price, in actuals	0	2,080	10
of which	81	Market comparable	EBITDA multiple	2	9	7
			Price, in %	18	100	67
of which derivatives	3,289					
of which interest rate products	801	Option model	Correlation, in %	20	100	72
			Prepayment rate, in %	6	34	17
			Volatility skew, in %	(4)	1	(1)
of which equity/index-related products	833	Option model	Correlation, in %	(60)	98	65
			Volatility, in %	0	105	64
			Buyback probability, in %	50	100	90
			Gap risk, in % ²	0	2	1
of which credit derivatives	634	Discounted cash flow	Credit spread, in bp	1	956	217
			Recovery rate, in %	0	45	20
			Discount rate, in %	3	50	16
			Default rate, in %	1	20	5
			Loss severity, in %	! -	100	64
			Correlation, in %	97	97	97
			Prepayment rate, in %	0	14	97
of which other trading accets	3.010		rrepayment rate, In %			
of which other trading assets of which	1,605	Market compared	Price, in %	0	110	23
OI WITCH		Market comparable			110	23
of which	1,095	Discounted cash flow	Market implied life expectancy, in years	3	18	8

 ¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.
 2 Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average
<u> </u>	· a raido	toormique	pat	74,40	raido	
CHF million, except where indicated						
Investment securities	42	_	_	-	_	-
Other investments	1,601					
of which private equity	29				-	
of which other equity investments	271					
			Market implied life			
of which life finance instruments	1,301	Discounted cash flow	expectancy, in years	2	18	6
Loans	4,530					
of which commercial and industrial loans	2,207					
of which	1,924	Discounted cash flow	Credit spread, in bp	89	1,116	420
of which	250	Market comparable	Price, in %	0	99	56
of which financial institutions	1,480					
of which	1,426	Discounted cash flow	Credit spread, in bp	43	1,430	371
Other intangible assets (mortgage servicing rights)	158	_	-	-	-	
Other assets	1,511					
of which loans held-for-sale	1,350					
of which	849	Discounted cash flow	Credit spread, in bp	117	973	292
			Recovery rate, in %	18	87	73
of which	280	Market comparable	Price, in %	0	102	88
Total level 3 assets at fair value	16,642					

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

		Valuation	Unobservable	Minimum	Maximum	Weighted
end of 2018	Fair value	technique	input	value	value	average
CHF million, except where indicated						
Customer deposits	453	_	_	_	_	_
Obligation to return securities received as collateral	30	_	_	_	_	_
Trading liabilities	3,589					
of which debt securities	25					
of which equity securities	37	Vendor price	Price, in actuals		3	0
of which derivatives	3,527					
of which interest rate derivatives	189	Option model	Basis spread, in bp	(20)	147	48
			Correlation, in %	1	100	41
			Prepayment rate, in %		26	7
of which foreign exchange derivatives	160		r repayment rate, iii 70	'		'-
of which	62	Discounted cash flow	Contingent probability, in %	95	95	95
Of Which			Credit spread, in bp	146	535	379
	37	Market comparable			100	100
of which	57		Price, in %	100		
of which	57	Option model	Correlation, in %	35	70	53
			Prepayment rate, in %	21	26	23
of which equity/index-related derivatives	1,500	Option model	Buyback probability, in % 2	50	100	74
			Correlation, in %	(60)	98	74
			Volatility, in %		178	30
of which credit derivatives	1,140					
of which	566	Discounted cash flow	Correlation, in %	38	82	47
			Credit spread, in bp	3	2,937	262
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	14
			Loss severity, in %	16	95	56
			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	80	14
of which	508	Market comparable	Price, in %	75	104	89
of which	20	Option model	Correlation, in %	50	50	50
			Credit spread, in bp	35	1,156	320
Short-term borrowings	784		·			
of which	61	Discounted cash flow	Credit spread, in bp	1,018	1,089	1,067
			Recovery rate, in %	40	40	40
of which	644	Option model	Buyback probability, in %	50	100	74
			Correlation, in %	(40)	98	64
			Fund gap risk, in % ³	0	4	1
			Volatility, in %	2	178	32
Long-term debt	12,671		volatility, iii 70		170	
of which structured notes over one year and						
up to two years	528					
of which	3	Discounted cash flow	Credit spread, in bp	112	112	112
of which	427	Option model	Correlation, in %	(40)	98	71
			Volatility, in %	2	178	31
of which structured notes over two years	11,800		• • • • • • • • • • • • • • • • • • •			
of which	1,570	Discounted cash flow	Credit spread, in bp	(11)	1,089	136
of which	43	Market comparable	Price, in %	(11)	46	30
						74
of which	9,533	Option model	Buyback probability, in % 2	50	100	
			Correlation, in %	(60)	98	65
			Gap risk, in % ³	0	4	1
			Mean reversion, in % 4	(55)	(1)	(7)
			Volatility, in %	0	178	27
Other liabilities	1,327	_	_	_	_	-

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Estimate of the probability of structured notes being put back to the Bank at the option of the investor over the remaining life of the financial instruments.

³ Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

⁴ Management's best estimate of the speed at which interest rates will revert to the long-term average.

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average
	1 all value	technique	iiiput	value	value	average
CHF million, except where indicated	455					
Customer deposits Obligation to return securities received as collateral	455		<u> </u>			
Trading liabilities of which interest rate derivatives	3,226 317					
of which	205	Ontion model	Basis spread, in bp	(05)	52	19
OI WINCH	200	Option model		(25)	100	
			Correlation, in % Prepayment rate, in %	6	34	60
of which	81	Market comparable		1	102	 44
of which		Market comparable	Price, in %	! -	102	
of which foreign exchange derivatives	100	0.4	Completion in 0/	(10)		
of which		Option model	Correlation, in %	(10)	70	51
; -, : ;			Prepayment rate, in %	27		30
of which	7	Discounted cash flow	Contingent probability, in %	95	95	95
of which equity/index-related derivatives	1,301					<u></u>
of which	947	Option model	Correlation, in %	(60)	98	55
			Volatility, in %	0	105	25
			Buyback probability, in % ²	50	100	90
of which	62	Vendor price	Price, in actuals	0	53	18
of which credit derivatives	898	Discounted cash flow	Credit spread, in bp	2	973	172
			Discount rate, in %	3	50	16
			Default rate, in %	1	20	5
			Recovery rate, in %	10	60	38
			Loss severity, in %	25	100	67
			Correlation, in %	38	85	54
			Prepayment rate, in %	0	20	7
			Term TRS/repo spread, in bp	176	176	176
Short-term borrowings	845					
of which	288	Option model	Correlation, in %	(40)	98	60
,-,-			Volatility, in %	4	105	26
of which 	527	Discounted cash flow	Credit spread, in bp	2	278	175
			Recovery rate, in %	25	40	29
of which	24	Market comparable	Price, in %	11	47	47
Long-term debt	12,501					
of which structured notes over two years	12,259			, -,		
of which	9,739	Option model	Correlation, in %	(60)	99	55
			Volatility, in %	0	105	21
			Buyback probability, in % ²	50	100	90
			Gap risk, in % 3	0	2	1
			Mean reversion, in % 4	(14)	(1)	(6)
of which	1,571	Discounted cash flow	Credit spread, in bp	2	729	105
Other liabilities	1,467					
of which failed sales	223					
of which	122	Market comparable	Price, in %	0	100	51
of which	25	Discounted cash flow	Credit spread, in bp	1,430	1,430	1,430

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Estimate of the probability of structured notes being put back to the Bank at the option of the investor over the remaining life of the financial instruments.

 $^{{\}bf 3} \ {\sf Risk} \ {\sf of} \ {\sf unexpected} \ {\sf large} \ {\sf declines} \ {\sf in} \ {\sf the} \ {\sf underlying} \ {\sf values} \ {\sf occurring} \ {\sf between} \ {\sf collateral} \ {\sf settlement} \ {\sf dates}.$

⁴ Management's best estimate of the speed at which interest rates will revert to the long-term average.

Fair value, unfunded commitments and term of redemption conditions of investment funds measured at NAV per share

				2018				2017
end of	Non- redeemable	Redeemable	Total fair value	Unfunded commit- ments	Non- redeemable	Redeemable	Total fair value	Unfunded commit- ments
Fair value of investment funds and unfunded commitments	s (CHF milli	on)						
Debt funds	12	0	12	0	0	0	0	0
Equity funds	103	1,011 ¹	1,114	53	61	992 ²	1,053	0
Equity funds sold short	(8)	(2)	(10)	0	0	(9)	(9)	0
Funds held in trading assets and trading liabilities	107	1,009	1,116	53	61	983	1,044	0
Debt funds	1	0	1	0	1	0	1	0
Equity funds	126	0	126	42	133	0	133	63
Real estate funds	214	0	214	34	178	0	178	44
Other private equity funds	24	5	29	29	31	0	31	16
Private equity funds	365	5	370	105	343	0	343	123
Debt funds	68	34	102	0	164	75	239	0
Equity funds	14	14	28	0	2	53	55	0
Other hedge funds	2	24	26	0	2	95	97	9
Hedge funds	84	72 ³	156	0	168	223 ⁴	391	9
Equity method investment funds	52	522	574	21	71	1,050	1,121	5
Funds held in other investments	501	599	1,100	126	582	1,273	1,855	137
Fair value of investment funds and unfunded commitments	608	⁵ 1,608	2,216	179 ⁷	643	⁵ 2,256 ⁶	2,899	137

- 1 46% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 40% is redeemable on a monthly basis with a notice period primarily of more than 30 days, 13% is redeemable on a quarterly basis with a notice period primarily of more than 45 days and 1% is redeemable on an annual basis with a notice period primarily of less than 30 days.
- 2 54% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 35% is redeemable on a monthly basis with a notice period primarily of more than 45 days and 2% is redeemable on an annual basis with a notice period primarily of more than 45 days and 2% is redeemable on an annual basis with a notice period primarily of more than 60 days.
- 3 65% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 60 days and 35% is redeemable on demand with a notice period primarily of less than 30 days.
- 4 51% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 45 days, 43% is redeemable on a monthly basis with a notice period primarily of less than 30 days and 6% is redeemable on demand with a notice period primarily of less than 30 days.
- 5 Includes CHF 102 million and CHF 229 million attributable to noncontrolling interests as of the end of 2018 and 2017, respectively.
- 6 Includes CHF 167 million attributable to noncontrolling interests as of the end of 2017.
- 7 Includes CHF 23 million and CHF 53 million attributable to noncontrolling interests as of the end of 2018 and 2017, respectively.

Assets measured at fair value on a nonrecurring basis		
end of	2018	2017
Assets held-for-sale recorded at fair value on a nonrecurring basis (CHF billion)		
Assets held-for-sale recorded at fair value on a nonrecurring basis	0.0	0.1
of which level 2	0.0	0.1

Difference between the aggregate fair value and the unpaid principal balances of fair value option-elected financial instruments

				2017	
Aggregate fair value	Aggregate unpaid principal	Difference	Aggregate fair value	Aggregate unpaid principal	Difference
81,818	81,637	181	77,498	76,643	855
14,873	15,441	(568)	15,307	15,372	(65)
6,706	9,240	(2,534)	8,468	10,910	(2,442)
(859)	(778)	(81)	(907)	(861)	(46)
(14,828)	(14,827)	(1)	(15,262)	(15,180)	(82)
(8,068)	(8,647)	579	(11,019)	(11,104)	85
(63,027)	(69,914)	6,887	(62,622)	(62,813)	191
(2,068)	(3,125)	1,057	(661)	(1,716)	1,055
640	3,493	(2,853)	708	3,375	(2,667)
	81,818 14,873 6,706 (859) (14,828) (8,068) (63,027) (2,068)	fair value unpaid principal 81,818 81,637 14,873 15,441 6,706 9,240 (859) (778) (14,828) (14,827) (8,068) (8,647) (63,027) (69,914) (2,068) (3,125)	fair value unpaid principal Difference 81,818 81,637 181 14,873 15,441 (568) 6,706 9,240 (2,534) (859) (778) (81) (14,828) (14,827) (1) (8,068) (8,647) 579 (63,027) (69,914) 6,887 (2,068) (3,125) 1,057	Aggregate fair value Aggregate unpaid principal Difference Aggregate fair value 81,818 81,637 181 77,498 14,873 15,441 (568) 15,307 6,706 9,240 (2,534) 8,468 (859) (778) (81) (907) (14,828) (14,827) (1) (15,262) (8,068) (8,647) 579 (11,019) (63,027) (69,914) 6,887 (62,622) (2,068) (3,125) 1,057 (661)	Aggregate fair value Aggregate unpaid principal Difference Aggregate fair value Aggregate unpaid principal 81,818 81,637 181 77,498 76,643 14,873 15,441 (568) 15,307 15,372 6,706 9,240 (2,534) 8,468 10,910 (859) (778) (81) (907) (861) (14,828) (14,827) (1) (15,262) (15,180) (8,068) (8,647) 579 (11,019) (11,104) (63,027) (69,914) 6,887 (62,622) (62,813) (2,068) (3,125) 1,057 (661) (1,716)

¹ Primarily loans held-for-sale.

Gains and losses on financial instruments

	2018	2017	2016
in	Net gains/ (losses)	Net gains/ (losses)	Net gains/ (losses)
Financial instruments (CHF million)			
Interest-bearing deposits with banks	21	13 ¹	4 ¹
of which related to credit risk	(10)	0	1
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,451 ¹	2,206 ^{1,4}	1,440 ¹
Other investments	241 ³	215 ²	214 ²
of which related to credit risk	(1)	(4)	(3)
Loans	717 ¹	1,542 ¹	1,643 ¹
of which related to credit risk	(296)	7	(16)
Other assets	770 ¹	480 ¹	(507) ²
of which related to credit risk	61	96	(200)
Due to banks and customer deposits	(39) ²	1 ²	(12)
of which related to credit risk	(37)	5	(22)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(890) 1	(418) ^{1,4}	(112) ¹
Short-term borrowings	2,807°	(512) ²	323 ²
of which related to credit risk	(5)	(23)	(4)
Long-term debt	4,375 ²	(6,615) ²	(1,136) ²
of which related to credit risk	7	(32)	22
Other liabilities	72³	181 ³	443 ²
of which related to credit risk	4	88	312

¹ Primarily recognized in net interest income.

² Included in loans or other assets.

² Primarily recognized in trading revenues.

³ Primarily recognized in other revenues.

⁴ Prior period has been corrected.

Gains/(losses) attributable to changes in instrument-specific credit risk on fair value option elected liabilities

			Gains/(losses) recorded in AOCI transferred to net income		
in	2018	Cumulative	2017	2018	2017
Financial instruments (CHF million)					
Deposits	36	(21)	(15)	(6)	0
Short-term borrowings	6	(53)	(63)	2	0
Long-term debt	1,520	(876)	(1,768)	53	32
of which treasury debt over two years	676	132	(513)	0	0
of which structured notes over two years	774	(1,060)	(1,246)	53	27
Total	1,562	(950)	(1,846)	49	32

¹ Amounts are reflected gross of tax.

Carrying value and fair value of financial instruments not carried at fair value

	Carrying				F : 1
	value	Level 1	Level 2	Level 3	Fair value Total
end of		Level I	Level 2	Level 3	Iotai
2018 (CHF million)					
Financial assets					
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	35,277	0	35,243	35	35,278
Loans	274,440	0	275,105	7,047	282,152
Other financial assets ¹	117,002	99,238	17,139	796	117,173
Financial liabilities					
Due to banks and deposits	376,741	197,320	179,448	0	376,768
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	9,795	0	9,795	0	9,795
Short-term borrowings	14,351	0	14,352	0	14,352
Long-term debt	90,406	0	89,707	854	90,561
Other financial liabilities ²	16,803	0	16,547	184	16,731
2017 (CHF million)					
Financial assets					
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	37,848	0	37,848	0	37,848
Loans	264,181	0	268,380	3,212	271,592
Other financial assets 1,3	170,687	109,414	60,518	1,108	171,040
Financial liabilities					
Due to banks and deposits	374,006	202,164	171,831	0	373,995
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	11,233	0	11,233	0	11,233
Short-term borrowings	15,359	0	15,359	0	15,359
Long-term debt	109,420	0	112,564	235	112,799
Other financial liabilities ^{2,3}	61,701	0	61,543	146	61,689

¹ Primarily includes cash and due from banks, interest-bearing deposits with banks, loans held-for-sale, cash collateral on derivative instruments, interest and fee receivables and non-marketable equity securities.

² Primarily includes cash collateral on derivative instruments and interest and fee payables.

^{3 2017} balances included brokerage receivables and payables, which, effective January 1, 2018, were no longer included due to the adoption of ASU 2016-01.

35 Assets pledged and collateral

Assets pledged

The Bank pledges assets mainly for repurchase agreements and other securities financing. Certain pledged assets may be encumbered, meaning they have the right to be sold or repledged. The encumbered assets are parenthetically disclosed on the consolidated balance sheet.

Assets pledged		
end of	2018	2017
CHF million		
Total assets pledged or assigned as collateral	117,895	130,038
of which encumbered	58,672	73,189

Collateral

The Bank receives cash and securities in connection with resale agreements, securities borrowing and loans, derivative transactions and margined broker loans. A significant portion of the collateral and securities received by the Bank was sold or repledged in connection with repurchase agreements, securities sold not yet purchased, securities borrowings and loans, pledges to clearing organizations, segregation requirements under securities laws and regulations, derivative transactions and bank loans.

Collateral						
end of	2018	2017				
CHF million						
Fair value of collateral received with the right to sell or repledge	406,389	433,190				
of which sold or repledged	193,267	212,155				

Other information		
end of	2018	2017
CHF million		
Swiss National Bank required minimum liquidity reserves	2,042	2,043
Other cash and securities restricted under Swiss and foreign regulations for financial institutions	24,681	26,928

→ Refer to "Note 36 – Assets pledged and collateral" in VI – Consolidated financial statements – Credit Suisse Group for further information.

36 Capital adequacy

The Bank is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements). The Bank, which is subject to regulation by FINMA, has based its capital adequacy calculations on US GAAP financial statements, as permitted by FINMA Circular 2013/1.

→ Refer to "Note 37 - Capital adequacy" in VI - Consolidated financial statements - Credit Suisse Group for further information.

As of December 31, 2018 and 2017, the Bank's capital position exceeded its capital requirements under the regulatory provisions outlined under Swiss Requirements.

Broker-dealer operations

Certain of the Bank's broker-dealer subsidiaries are also subject to capital adequacy requirements. As of December 31, 2018 and 2017, the Bank and its subsidiaries complied with all applicable regulatory capital adequacy requirements.

Dividend restrictions

Certain of the Bank's subsidiaries are subject to legal restrictions governing the amount of dividends they can pay (for example, pursuant to corporate law as defined by the Swiss Code of Obligations).

As of December 31, 2018 and 2017, Credit Suisse AG was not subject to restrictions on its ability to pay the proposed dividends.

Swiss metrics		
		Phase-in
end of	2018	2017
Swiss capital (CHF million)		
Swiss CET1 capital	38,810	38,288
Going concern capital	51,634	53,995
Gone concern capital	35,683	35,771
Total loss-absorbing capacity (TLAC)	87,317	89,766
Swiss risk-weighted assets and leverage expos	sure (CHF million)	
Swiss risk-weighted assets	286,682	273,332
Leverage exposure	885,854	921,793
Swiss capital ratios (%)		
Swiss CET1 ratio	13.5	14.0
Going concern capital ratio	18.0	19.8
Gone concern capital ratio	12.4	13.1
TLAC ratio	30.5	32.8
Swiss leverage ratios (%)		
Swiss CET1 leverage ratio	4.4	4.2
Going concern leverage ratio	5.8	5.9
Gone concern leverage ratio	4.0	3.9
TLAC leverage ratio	9.9	9.7
Swiss capital ratio requirements (%)		
Swiss CET1 ratio requirement	9.46	9.0
Going concern capital ratio requirement	12.86	12.0
Gone concern capital ratio requirement	8.9	6.2
TLAC ratio requirement	21.76	18.2
Swiss leverage ratio requirements (%)		
Swiss CET1 leverage ratio requirement	2.9	2.6
Going concern leverage ratio requirement	4.0	3.5
Gone concern leverage ratio requirement	3.0	2.0
TLAC leverage ratio requirement	7.0	5.5

37 Assets under management

The following disclosure provides information regarding client assets, assets under management and net new assets as regulated by FINMA.

→ Refer to "Note 38 – Assets under management" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Assets under management		
end of	2018	2017
CHF billion		
Assets in collective investment instruments managed by Credit Suisse	178.3	177.4
Assets with discretionary mandates	256.5	267.3
Other assets under management	904.4	923.6
Assets under management (including double counting)	1,339.2	1,368.3
of which double counting	42.4	44.6
Changes in assets under management		
Changes in assets under management	2018	2017
Changes in assets under management Assets under management (CHF billion)	2018	
Changes in assets under management Assets under management (CHF billion) Balance at beginning of period ¹		
Changes in assets under management Assets under management (CHF billion) Balance at beginning of period ¹ Net new assets/(net asset outflows)	1,368.3	1,243.9
Changes in assets under management Assets under management (CHF billion) Balance at beginning of period ¹ Net new assets/(net asset outflows)	1,368.3 56.0	1,243.9 36.2
Changes in assets under management Assets under management (CHF billion) Balance at beginning of period ¹ Net new assets/(net asset outflows) Market movements, interest, dividends and foreign exchange	1,368.3 56.0 (68.0)	1,243.9 36.2 87.6
Changes in assets under management Assets under management (CHF billion) Balance at beginning of period ¹ Net new assets/(net asset outflows) Market movements, interest, dividends and foreign exchange of which market movements, interest and dividends ²	1,368.3 56.0 (68.0) (54.8)	1,243.9 36.2 87.6 89.8

¹ Including double counting.

38 Litigation

→ Refer to "Note 39 – Litigation" in VI – Consolidated financial statements – Credit Suisse Group for further information.

² Net of commissions and other expenses and net of interest expenses charged.

39 Significant subsidiaries and equity method investments

Significant subsidiaries

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
End of 2018				
Credit Suisse AG				
Alpine Securitization LTD	George Town, Cayman Islands	USD	0.0	100
Asset Management Finance LLC	Wilmington, United States	USD	167.8	100
Banco Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	53.6	100
Banco Credit Suisse (México), S.A.	Mexico City, Mexico	MXN	1,716.7	100
Banco de Investimentos Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	164.8	100
BANK-now AG	Horgen, Switzerland	CHF	30.0	100
Boston Re Ltd.	Hamilton, Bermuda	USD	2.0	100
Casa de Bolsa Credit Suisse (México), S.A. de C.V.	Mexico City, Mexico	MXN	274.0	100
Column Financial, Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse (Australia) Limited	Sydney, Australia	AUD	34.1	100
Credit Suisse (Brasil) S.A. Corretora de Titulos e Valores Mobiliários	São Paulo, Brazil	BRL	98.4	100
Credit Suisse (Deutschland) Aktiengesellschaft	Frankfurt, Germany	EUR	130.0	100
Credit Suisse (Hong Kong) Limited	Hong Kong, China	HKD	13,758.0	100
Credit Suisse (Italy) S.p.A.	Milan, Italy	EUR	170.0	100
Credit Suisse (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	230.9	100
Credit Suisse (Qatar) LLC	Doha, Qatar	USD	29.0	100
Credit Suisse (Schweiz) AG	Zurich, Switzerland	CHF	100.0	100
Credit Suisse (Singapore) Limited	Singapore, Singapore	SGD	743.3	100
Credit Suisse (UK) Limited	London, United Kingdom	GBP	245.2	100
Credit Suisse (USA), Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse Asset Management (UK) Holding Limited	London, United Kingdom	GBP	144.2	100
Credit Suisse Asset Management Immobilien Kapitalanlagegesellschaft mbH	Frankfurt, Germany	EUR	6.1	100
Credit Suisse Asset Management International Holding Ltd	Zurich, Switzerland	CHF	20.0	100
Credit Suisse Asset Management Investments Ltd	Zurich, Switzerland	CHF	0.1	100
Credit Suisse Asset Management Limited	London, United Kingdom	GBP	45.0	100
Credit Suisse Asset Management, LLC	Wilmington, United States	USD	1,086.8	100
Credit Suisse Atlas I Investments (Luxembourg) S.à.r.l.	Luxembourg, Luxembourg	USD	0.0	100
Credit Suisse Brazil (Bahamas) Limited	Nassau, Bahamas	USD	70.0	100
Credit Suisse Business Analytics (India) Private Limited	Mumbai, India	INR	40.0	100
Credit Suisse Capital LLC	Wilmington, United States	USD	937.6	100
Credit Suisse Energy LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Equities (Australia) Limited	Sydney, Australia	AUD	62.5	100
Credit Suisse Finance (India) Private Limited	Mumbai, India	INR	1,050.1	100
Credit Suisse First Boston (Latam Holdings) LLC	George Town, Cayman Islands	USD	23.8	100
Credit Suisse First Boston Finance B.V.	Amsterdam, The Netherlands	EUR	0.0	100
Credit Suisse First Boston Mortgage Capital LLC	Wilmington, United States	USD	356.6	100
Credit Suisse First Boston Next Fund, Inc.	Wilmington, United States	USD	10.0	100
Credit Suisse Fund Management S.A.	Luxembourg, Luxembourg	CHF	0.3	100

Significant subsidiaries (continued)

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
Credit Suisse Fund Services (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	1.5	100
Credit Suisse Funds AG	Zurich, Switzerland	CHF	7.0	100
Credit Suisse Group Finance (U.S.) Inc.	Wilmington, United States	USD	100.0	100
Credit Suisse Hedging-Griffo Corretora de Valores S.A.	São Paulo, Brazil	BRL	29.6	100
Credit Suisse Holding Europe (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	32.6	100
Credit Suisse Holdings (Australia) Limited	Sydney, Australia	AUD	3.0	100
Credit Suisse Holdings (USA), Inc.	Wilmington, United States	USD	550.0	100
Credit Suisse InvestLab AG	Zurich, Switzerland	CHF	1.0	100
Credit Suisse Istanbul Menkul Degerler A.S.	Istanbul, Turkey	TRY	6.8	100
Credit Suisse Leasing 92A, L.P.	Wilmington, United States	USD	43.9	100
Credit Suisse Life & Pensions AG	Vaduz, Liechtenstein	CHF	15.0	100
Credit Suisse Life (Bermuda) Ltd.	Hamilton, Bermuda	USD	1.0	100
Credit Suisse Loan Funding LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Management LLC	Wilmington, United States	USD	896.4	100
Credit Suisse Prime Securities Services (USA) LLC	Wilmington, United States	USD	263.3	100
Credit Suisse Private Equity, LLC	Wilmington, United States	USD	42.2	100
Credit Suisse PSL GmbH	Zurich, Switzerland	CHF	0.0	100
Credit Suisse Saudi Arabia	Riyadh, Saudi Arabia	SAR	625.0	100
Credit Suisse Securities (Canada), Inc.	Toronto, Canada	CAD	3.4	100
Credit Suisse Securities (Europe) Limited	London, United Kingdom	USD	3.859.3	100
Credit Suisse Securities (Hong Kong) Limited	Hong Kong, China	HKD	2,080.9	100
Credit Suisse Securities (India) Private Limited	Mumbai, India	INR	2,214.7	100
Credit Suisse Securities (Japan) Limited	Tokyo, Japan	JPY	78,100.0	100
Credit Suisse Securities (Johannesburg) Proprietary Limited	Johannesburg, South Africa	ZAR	0.0	100
Credit Suisse Securities (Malaysia) Sdn. Bhd.	Kuala Lumpur, Malaysia	MYR	100.0	100
Credit Suisse Securities (Moscow)	Moscow, Russia	RUB	97.1	100
Credit Suisse Securities (Singapore) Pte Limited	Singapore, Singapore	SGD	30.0	100
Credit Suisse Securities (Thailand) Limited	Bangkok, Thailand	THB	500.0	100
Credit Suisse Securities (USA) LLC	Wilmington, United States	USD	1,131.7	100
Credit Suisse Services (India) Private Limited	Pune, India	INR	0.1	100
Credit Suisse Services (USA) LLC	Wilmington, United States	USD	0.0	100
CS Non-Traditional Products Ltd.	Nassau, Bahamas	USD	0.1	100
CSAM Americas Holding Corp.	Wilmington, United States	USD	0.0	100
DLJ Merchant Banking Funding, Inc	Wilmington, United States	USD	0.0	100
DLJ Mortgage Capital, Inc.	Wilmington, United States	USD	0.0	100
Fides Treasury Services AG	Zurich, Switzerland	CHF	2.0	100
JSC "Bank Credit Suisse (Moscow)"	Moscow, Russia	USD	37.8	100
Lime Residential Ltd	Nassau, Bahamas	USD	100.0	100
Merban Equity AG	Zug, Switzerland	CHF	0.1	100
Merchant Holding, LLC		USD	0.0	100
Neue Aargauer Bank AG	Wilmington, United States Aarau, Switzerland	CHF	134.1	100
Solar Investco II Ltd.	George Town, Cayman Islands	USD	0.0	100
SPS Holding Corporation SVC – AG für KMU Risikokapital	Wilmington, United States Zurich, Switzerland	USD	0.0	100
				100
PT Credit Suisse Sekuritas Indonesia	Jakarta, Indonesia	IDR	235,000.0	99
Credit Suisse Hypotheken AG	Zurich, Switzerland	CHF	0.1	98
Credit Suisse International	London, United Kingdom	USD	12,366.1	98 1

 $[\]textbf{1} \ \mathsf{Remaining} \ 2\% \ \mathsf{held} \ \mathsf{directly} \ \mathsf{by} \ \mathsf{Credit} \ \mathsf{Suisse} \ \mathsf{Group} \ \mathsf{AG}. \ 98\% \ \mathsf{of} \ \mathsf{voting} \ \mathsf{rights} \ \mathsf{and} \ 98\% \ \mathsf{of} \ \mathsf{equity} \ \mathsf{interest} \ \mathsf{held} \ \mathsf{by} \ \mathsf{Credit} \ \mathsf{Suisse} \ \mathsf{AG}.$

Significant equity method investments Equity interest Company name Domicile in % End of 2018 Credit Suisse AG Swisscard AECS GmbH Horgen, Switzerland 33 Credit Suisse Founder Securities Limited Beijing, China Melbourne, Australia 23 E.L. & C. Baillieu Stockbroking (Holdings) Pty Ltd 20 ICBC Credit Suisse Asset Management Co., Ltd. Beijing, China 51 York Capital Management Global Advisors, LLC New York, United States São Paulo, Brazil 0 1 Holding Verde Empreendimentos e Participações S.A.

40 Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)

→ Refer to "Note 43 – Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)" in VI – Consolidated financial statements – Credit Suisse Group for further information.

¹ The Bank holds a significant noncontrolling interest.

Controls and procedures

Evaluation of disclosure controls and procedures

The Bank has evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of the end of the period covered by this report under the supervision and with the participation of management, including the Bank Chief Executive Officer (CEO) and Chief Financial Officer (CFO), pursuant to Rule 13(a)-15(a) under the Securities Exchange Act of 1934 (the Exchange Act). There are inherent limitations to the effectiveness of any system of controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective controls and procedures can only provide reasonable assurance of achieving their control objectives.

The CEO and CFO concluded that, as of December 31, 2018, the design and operation of the Bank's disclosure controls and procedures were effective, in all material respects, to ensure that information required to be disclosed in reports filed and submitted under the Exchange Act is recorded, processed, summarized and reported as and when required.

Management report on internal control over financial reporting

The management of the Bank is responsible for establishing and maintaining adequate internal control over financial reporting. The Bank's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Management has made an evaluation and assessment of the Bank's internal control over financial reporting as of December 31, 2018 using the criteria issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "Internal Control – Integrated Framework".

Based upon its review and evaluation, management, including the Bank CEO and CFO, has concluded that the Bank's internal control over financial reporting is effective as of December 31, 2018.

The Bank's independent auditors, KPMG AG, have issued an unqualified opinion on the effectiveness of the Bank's internal control over financial reporting as of December 31, 2018, as stated in their report, which follows.

Changes in internal control over financial reporting

There were no changes in the Bank's internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting.



Report of the Independent Registered Public Accounting Firm

To the shareholders and Board of Directors Credit Suisse AG, Zurich

Opinion on Internal Control Over Financial Reporting

We have audited Credit Suisse AG and subsidiaries' (the "Bank") internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Bank maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Bank as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"), and our report dated March 22, 2019 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Bank's Board of Directors and management are responsible for maintaining effective internal control over financial reporting and the Bank's management is responsible for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Bank's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Bank in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

KPMG AG, Badenerstrasse 172, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.



Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG AG

Nicholas Edmonds Licensed Audit Expert Auditor in Charge

Zurich, Switzerland March 22, 2019 Anthony Anzevino Global Lead Partner

KPMG AG, Badenerstrasse 172, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.