

# Capital adequacy and liquidity disclosures

Disclosure as at 31 December 2016

With the information showing its position as at 31 December 2016, the bank meets the requirements of the Ordinance on Capital Adequacy and Risk Diversification for Banks and Securities Dealers and the disclosure rules contained in FINMA Circulars 2008/22 and 2016/01 (where already applicable).

### **Developments in Basel III regulatory capital adequacy ratios and liquidity**

Zürcher Kantonalbank's equity base as at 31 December 2016, both weighted and unweighted, continues to exceed regulatory requirements considerably. The same applies to the short-term liquidity requirements with respect to the liquidity coverage ratio (LCR).

The total capital ratio for the group was 17.5 percent as at 31 December 2016 (2015: 17.9 percent). The common equity Tier 1 capital ratio is 15.6 percent (2015: 15.8 percent).

As at 31 December 2016, the risk-based capital requirement as a systemically important bank amounted to CHF 9,691 million (2015: CHF 9,244 million) against eligible capital for the group of CHF 11,564 million (2015: CHF 11,293 million). This corresponds to a surplus of CHF 1,873 million (2015: CHF 2,049 million).

The increase in eligible capital is mainly due to retained earnings. The increased capital requirement, however, reflects the increase in risk-weighted assets to CHF 65,987 million (2015: CHF 62,942 million). This is justified in particular by the growth in mortgage-secured loans and the higher credit equivalents in derivative and repo transactions.

The leverage ratio of 6.7 percent at the group level is well above the requirement (as a systemically important bank) of 3.4 percent. This reflects Zürcher Kantonalbank's solid equity base, also on an unweighted basis.

The group's LCR averaged 132% in the fourth quarter of 2016 (previous year: 128%), once again well in excess of the 100% required.

### **About the bank**

In accordance with its public service mandate, Zürcher Kantonalbank's primary focus is on its customers in the Greater Zurich area. To a limited extent, the bank also operates in the rest of Switzerland and abroad.

Zürcher Kantonalbank is an independent public-law institution of the canton of Zurich. The corporate (endowment) capital provided by the canton is a component of Zürcher Kantonalbank's equity. Should these resources prove inadequate, the canton additionally provides a guarantee for all of the bank's non-subordinated liabilities.

## 1 Qualitative disclosures

### 1.1 General information about risk management

**Risk profile.** Given the persistently negative Swiss franc interest rates, management of balance sheet risks remains a challenge. The high interest rate sensitivity in the banking book in the long term primarily takes into account the risk of a protracted period of low interest rates.

In the lending business the volume of mortgage loans increased by just under 5 percent to CHF 77.3 billion with no changes to the lending policy. Of this, CHF 57 billion is attributable to real estate financing to private individuals. There were no material changes in the rating structure of the various credit portfolios.

With the exception of event-driven movements, such as the Brexit referendum in June, the value-at-risk of the trading book for 2016 shows a fairly stable trend. The low risk figures for trading reflect the customer-oriented trading strategy.

The key figure for the short-term liquidity risk shows Zürcher Kantonalbank's comfortable liquidity position. As of 2018 additional requirements with respect to the rate of financing in the terms of a net stable fund ratio (NSFR) will become effective. The NSFR intends ensuring a sustainable and stable financing of the asset-side banking business as well as of the off-balance-sheet activities. Zürich Kantonalbank calculates this ratio already. The result shows as well a significant surplus coverage.

Among operational risks, the management of risks relating to cyber crime continues to require particular attention. The legal and reputation risks in the cross-border financial services business are a focal point in the management of compliance risks, together with adapting to changes to the regulatory framework for financial services providers.

**Internal controls system.** Zürcher Kantonalbank's internal controls system covers all control structures and processes, which at all levels of the institution constitute the basis for the achievement of the bank's business policy objectives, the protection of the bank's credit rating and reputation, compliance with legal and ethical norms, as well as the reliability of financial reporting. The internal controls system involves not only retrospective checks but also planning and management activities. The following are key features of the internal controls system:

- the risk policy parameters of the board of directors for safeguarding the bank's credit rating and reputation,
- systematic risk analysis and periodic monitoring of the appropriateness and effectiveness of internal controls by the executive board and board of directors,
- the bank's established processes for risk management and compliance with applicable standards and
- the systematic process to ensure the appropriateness and effectiveness of internal controls by the individual business units and processes.

**Principles of risk management.** The objective of risk management is to support the bank in generating added value whilst retaining a first-class credit rating and reputation. Zürcher Kantonalbank's approach to risk management is based on the following principles:

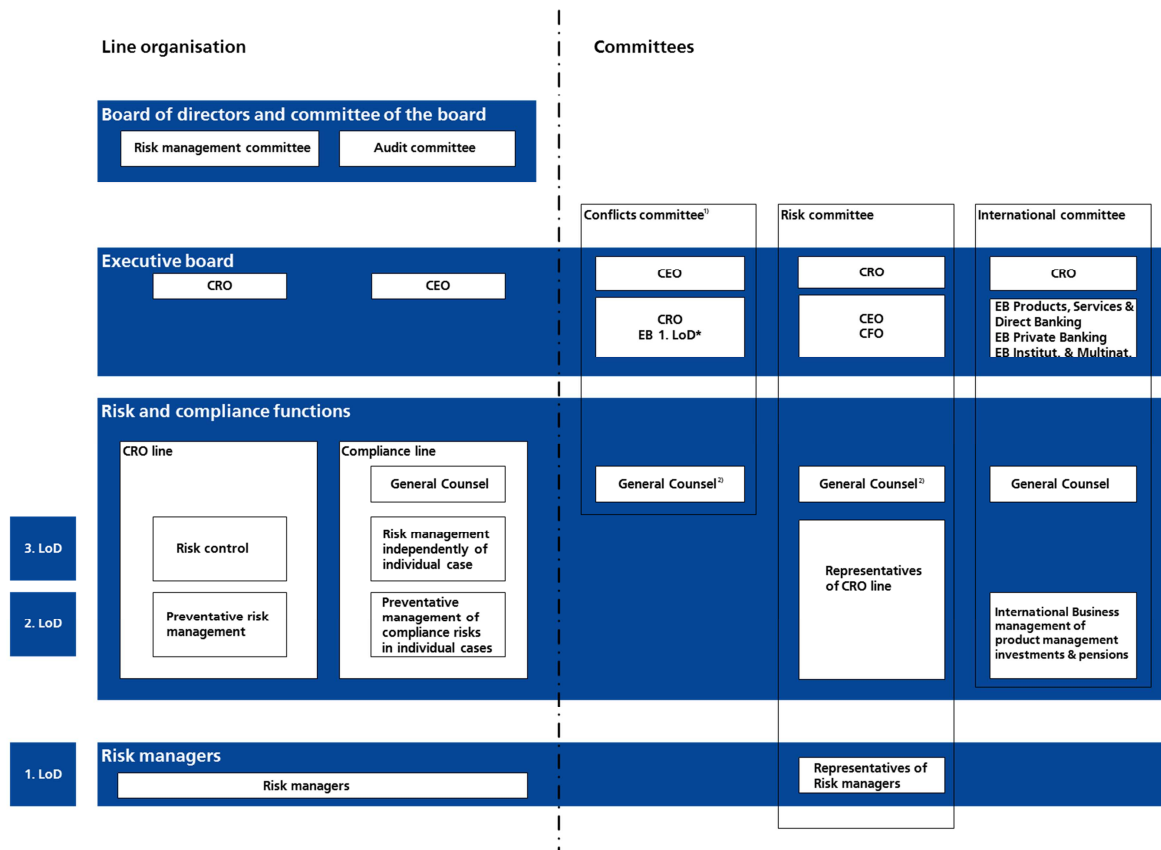
- Risk culture: the bank fosters a risk culture that is geared towards responsible behaviour. Risk managers bear responsibility for profits and losses generated on the risks entered into. In addition, they bear primary responsibility for identifying transactions and structures with particular business policy risks, conflicts of interest or particular effects on the bank's reputation.
- Separation of functions: for significant risks and to avoid conflicts of interest, the bank has established control processes that are independent of management.
- Risk identification and monitoring: the bank only enters into transactions if the risks are in accordance with its business strategy and can be appropriately identified, managed and monitored.
- Risk and return: in relation to all transactions, the bank seeks to achieve a balanced relationship between risk and return. The assessment of the risk and return profile takes account of both quantifiable and non-quantifiable risks.
- Transparency: risk reporting and disclosure are guided by high industry standards in terms of objectivity, scope, transparency and timeliness.

These principles constitute the basis for determining the organisational structure and detailed group-wide risk management framework.

**Principles of compliance policy.** The objective of compliance is to ensure that Zürcher Kantonalbank conducts its business operations in accordance with legal and ethical norms. The principles of compliance policy are as follows: relevant legal and ethical norms; anchoring ethical and performance-related basic values in a code of conduct; duty of all employees and members of the governing bodies to comply with the laws, regulations, internal rules, industry standards, codes of conduct with corresponding sanctions for violations of the rules; special reporting procedure for identified violations of the rules for employees (whistle-blowing); primary responsibility of the executive board for compliance; annual assessment of the compliance risk based on the risk inventory with corresponding activity plan, as well as independence of the compliance function. The most important principle of all is that Zürcher Kantonalbank conducts its banking operations in accordance with the statutory and regulatory provisions as well as recognised professional and ethical principles within the banking industry.

**Risk and compliance organisation.** Zürcher Kantonalbank's risk management line organisation is based on the Three Lines of Defence model. In organisational terms, the risk acceptance and risk management functions (1st Line of Defence), on the one hand, and preventive risk management (2nd Line of Defence) and risk control (3rd Line of Defence), on the other, are separated at executive-board level.

Fig. 1: Risk and compliance organisation



<sup>1)</sup> Escalation body is the committee of the board <sup>2)</sup> General counsel has right of escalation to the committee of the board at any time <sup>\*)</sup> Line of Defence

**Board of directors and committee of the board.** The board of directors approves the principles of risk management and compliance, code of conduct, risk acceptance and additional risk policy parameters. The board of directors is also responsible for the monitoring and regular examination of the appropriateness and effectiveness of internal controls, including the risk and compliance organisation.

The board of directors approves matters involving major financial exposure and/or having particular effects on the Group's reputation in key areas. The committee of the board approves limits and discusses matters involving particular business policy risks, where they lie outside the remit of the executive board and do not fall within the remit of the board of directors. The risk management and audit committees support the board of directors in its tasks.

**Executive board.** The executive board approves the provisions for identifying, assessing, measuring, limiting and monitoring risk. It provides the board of directors with periodic reports on the overall bank risks and compliance with the risk policy parameters. The executive board also informs the board of directors of measurement methods and models as well as their consequences for risk management. The executive board is also responsible for approving matters with particular business policy risks, conflicts of interest or particular effects on the reputation of Zürcher Kantonalbank, unless they are assigned to another officer-holder in regulatory terms.

**Conflicts committee.** The members of the executive board represented on the conflicts committee take decisions on matters with particular business policy risks. The escalation body of the conflicts committee is the committee of the board.

**Risk committee.** The risk committee assists the executive board in formulating risk management processes. Decisions of the risk committee are taken on the basis of responsibilities delegated by the members of the executive board represented on the risk committee. The risk managers represented on four separate sub-committees (credit, trading, treasury and operational risk) and members of the risk and compliance organisation provide preliminary advice on the risk committee's business and formulate proposals for it. In a crisis situation, individual crisis management teams reporting to the risk committee ensure that necessary and appropriate measures are defined and implemented.

**International committee.** The international committee is tasked with defining the business policy parameters for matters with an international dimension, as well as corresponding monitoring and reporting and obtaining the necessary approval to carry on the relevant activities in each country.

**CRO line.** The chief risk officer (CRO) is a member of the executive board and manages the Risk unit. He has a right of intervention that permits measures to be assigned to the risk managers if required by the risk situation or to protect the bank.

Risk control (3rd Line of Defence) is responsible for identifying and monitoring risks at portfolio level, monitoring compliance with the risk policy parameters and integrated risk reporting to the executive board and board of directors. The risk control function is responsible for defining methods of risk measurement, parts of the acceptance procedure for new products and valuation methods, model validation, as well as execution and quality assurance in relation to the risk measurement implemented.

Preventative risk management (2nd Line of Defence) is responsible for analysis and examination of transactions prior to conclusion in the context of existing delineations of power and mandatory consultations, the definition of parameters at individual transaction level, the continuous local monitoring of risks and the training of risk managers.

**Compliance line.** The general counsel reports directly to the CEO and manages the legal, tax and compliance unit. As a member of the risk, conflicts and international committees, he has a right of escalation to the committee of the board. He also enjoys direct access to the committee of the board at all times.

The compliance function as 3rd line of defence has the following duties: examining on an annual basis the compliance risk inventory and preparing the annual activity plan with key focal points relating to the management of compliance risk, formulating proposals and if necessary implementing defined monitoring and control duties in the context of post-deal control, defining the risk management tools and implementing risk control measures independently of the individual case such as editing directives in the context of the implementation of new directives and staging training events. The compliance functions as 2nd line of defence is primarily responsible for providing forward-looking legal advice with the objective of avoiding or minimising individual identified risks and threats arising due to legal parameters. Legal advice is provided in the context of existing mandatory consultations, as a pre-deal consultation or on request.

**Risk managers.** The risk managers (1st Line of Defence) bear responsibility for profits and losses generated on the risks entered into. They are responsible for the continuous, active management of risks and for constant compliance with the risk policy parameters, relevant laws, ordinances and standards. As risk manager, the sales units are responsible for credit risks; the trading and capital markets unit is responsible for market risks in the trading book. Interest rate risks in the banking book and liquidity risks are managed on the one hand by the Treasury in the Finance business unit and on the other hand by the trading and capital markets unit. All units of the bank are responsible for the management of operational and compliance risks.

**Risk reporting.** Risk controlling reports on a quarterly basis in the context of integrated risk reporting to the executive board and board of directors on the development of the risk profile, on material internal and external events and on findings from monitoring activities. Quarterly reports are supplemented by special analysis of significant themes. Besides quarterly reporting, various reports are produced for the individual types of risk; in terms of the frequency with which they are published and group of recipients, they are tailored to the individual risks and ensure the provision of comprehensive, objective and transparent information for decision-makers and supervisory bodies. The compliance function also reports directly to the board of directors once a year.

## **1.2 Regulatory capital adequacy requirements**

### **1.2.1 Participations and scope of consolidation**

The scope of consolidation for the purpose of calculating capital adequacy is identical to that used in preparing the group financial statements.

The parent company's capital is calculated on a solo consolidated basis in accordance with Art. 10 para. 3 CAO and includes the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd., St. Peter Port, Guernsey. There are no other differences between the scopes of consolidation for regulatory and accounting purposes.

The group's scope of consolidation includes the parent company, Zürcher Kantonalbank, as well as all directly and indirectly wholly owned subsidiaries: Zürcher Kantonalbank Finance (Guernsey) Ltd., Zürcher Kantonalbank Österreich AG and Swisscanto, consisting of Swisscanto Holding Ltd., Swisscanto Fund Management Company Ltd., Swisscanto Pensions Ltd., Swisscanto Funds Centre Ltd. and Swisscanto Asset Management International SA.

The representative office in São Paulo, which from an accounting perspective is a non-material majority interest of Zürcher Kantonalbank Representações Ltda, is not fully consolidated.

Equity instruments of companies operating in the financial sector are treated in accordance with the procedure described in Articles 33 – 40 CAO. Here the portion above a threshold is deducted directly from equity, while the portion below the threshold is risk-weighted.

Zürcher Kantonalbank has several significant participations that are not consolidated. The treatment of these positions in terms of capital adequacy is illustrated in the figure below.

Fig. 2: Treatment of non-consolidated significant participations<sup>1</sup> with respect to capital adequacy

Company name	Seat	Business activity	Treatment for capital adequacy purposes	
			Threshold approach <sup>2</sup>	Weighting
Technopark Immobilien AG	Zurich	Project planning, construction, maintenance		X
Pfandbriefzentrale der schweizerischen Kantonalbanken AG	Zurich	Pfandbrief institution	X	
Aduno Holding AG	Zurich	Participations	X	
Zürcher Kantonalbank Representações Ltda.	São Paulo	Representative office	X	

<sup>1</sup> Shows all subsidiaries (interest > 50 percent) that are not consolidated for reasons of materiality and participations where the interest exceeds 10 percent. Additionally, the share of these interests in the corporate capital must amount to > CHF 2 million or book value to > CHF 15 million.

<sup>2</sup> Equity instruments of companies operating in the financial sector are treated in accordance with the procedure described in Articles 33 – 40 CAO. Here the portion above a threshold is deducted directly from equity, while the portion below the threshold is risk-weighted.

## 1.2.2 Eligible and required capital

**Weighted capital adequacy requirements.** Under Basel III, a selection of different approaches is available to banks for the calculation of capital adequacy requirements for credit, market and operational risks. The required capital for credit risks is calculated in accordance with the international standard approach (SA-BIS). The model-based approach is used for market risk combined with the standard approach for specific interest rate risks, and the basic indicator approach (BIA) for operational risk.

The capital requirements for systemically important institutions essentially consist of capital adequacy requirements for orderly continuation of a bank's business (going concern) and additional loss-absorbing funds (gone concern). The total requirement for the orderly continuation of a bank's business consists of a base requirement and supplements, which are calculated annually on account of market share and overall exposure. Currently there are only requirements for additional loss-absorbing funds for globally systemically important banks (G-SIB). Therefore they are not relevant to Zürcher Kantonalbank, as a domestically systemically important institution (D-SIB). With respect to domestic systemically important institutions (D-SIB), the definition of the gone-concern requirements has not yet taken place. In spring 2017, an evaluation verdict of the Swiss Federal Council should provide further information.

The capital adequacy requirement for Zürcher Kantonalbank as a domestically systemically important institution is stipulated by an individual ruling issued by the Swiss Financial Market Supervisory Authority (FINMA). As at 31 December 2016 this amounted to 14.0 percent of risk-weighted assets for both the parent company and the group. The countercyclical capital buffer on mortgages secured on residential properties in Switzerland increased the requirement by a further CHF 453 million, or 0.7 percent, to 14.7 percent.

As at 31 December 2016, the minimum required capital amounted to CHF 5,279 million (2015: CHF 5,035 million) against eligible capital of CHF 11,564 million (2015: CHF 11,293 million). The minimum required capital was therefore CHF 244 million higher than in the previous year. The increase in required capital for credit risks is largely attributable to the growth in mortgage-secured loans and higher credit equivalents in derivative and repo transactions. The requirements for market risks declined slightly compared to the previous year, while those for operational risks increased slightly.

The eligible capital of Zürcher Kantonalbank increased significantly in the 2016 financial year, which is mainly due to retained earnings. The total capital ratio of 17.5 percent (2015: 17.9 percent) and the common equity Tier 1 capital ratio of 15.6 percent (2015: 15.8 percent) based on the required minimum capital reflect Zürcher Kantonalbank's solid equity base.



**Unweighted capital adequacy requirements (leverage ratio).** The unweighted capital adequacy requirement (leverage ratio) amounts to 3.4 percent pursuant to the FINMA ruling. The systemically important leverage ratio of 6.7 percent as of 31 December 2016 far exceeds the requirements, highlighting the strength of Zürcher Kantonalbank's capital base, even under the unweighted capital adequacy requirements.

## Risk categories

Zürcher Kantonalbank's risk strategy is based on the risk categorisation illustrated below.

Fig. 3: Risk categories



**Systemic risks.** Systemic risk is where an institution suffers damage due to negative developments in the financial system that are beyond its control. Systemic risks cannot be independently limited and controlled by a single institution. Systemic risks are managed in conjunction with the Swiss National Bank (SNB), Swiss Financial Market Supervisory Authority (FINMA) and, if necessary, the Federal Council. The SNB and FINMA are responsible for establishing adequate processes for managing systemic risks.

**Strategic risks.** Strategic risks include the risk of pursuing a strategy that is inappropriate against the backdrop of relevant factors of influence but also the risk of not implementing strategies successfully. Strategic risks are managed in the context of the bank's strategy process.

**Reputation risks.** Reputation risks involve damage to Zürcher Kantonalbank's image and brand value. As reputation risks can potentially arise as a result of any of the bank's business operations, they are controlled chiefly by ensuring competency, integrity and reliability on a bank-wide basis. This is a multi-layered task that embraces the bank's entire range of operational and strategic management tools. The findings of continuous media monitoring and periodic reputation monitoring are also important to Zürcher Kantonalbank's management of reputation risk.

**Other risks.** The definition of risk categories as well as the strategy, processes and organisation of risk management are described in the following sections.

### 1.3 Credit risks

Loans, promises of payment and trading business involve credit risks. Credit risk is the risk whereby payments due from a debtor are not met or are not met on time.

#### 1.3.1 Strategy, organisation and processes for credit risks

**Strategy.** The strategy for managing credit risks is set out in the internal lending policy, which is reviewed and updated by the risk organisation in an annual, structured process, and approved by the executive board. The principles defined in the lending policy include the measurement and management of risks by means of uniform, binding objectives and instruments, acceptance of risks based on objective, business-related criteria, in reasonable proportion to the bank's risk capacity and sustainable management of the quality of the credit portfolio.

The bank adopts a risk and cost-based pricing policy, with transparent credit decisions and a selective, quality-oriented strategy for the procurement of funds. Particular attention is also paid to environmental and social risks in the credit assessment process. In recognition of the total commitment of owners, higher risks are also accepted on occasions for SMEs from the Greater Zurich area.

Based on the Three Lines of Defence model, the preventative risk management and risk control functions are separated from risk management at executive board level. Preventative risk management is responsible for setting parameters for the lending policy, analysing and examining transactions in the context of existing delineations of power, continuous local monitoring of risks and the training of risk managers. Risk control, as the 3rd Line of Defence, is responsible for monitoring risks and risk reporting at portfolio level, as well as defining methods of risk management.

Credit risks are managed and controlled at individual exposure level by means of detailed parameters and areas of responsibility within the credit process, whilst at portfolio level they are managed and controlled by limiting risk capital for the credit business in accordance with the capital-at-risk approach. Another key control element in credit risk management is risk-adjusted pricing, which includes expected losses (standard risk costs) as well as the cost of the risk capital to be retained in order to cover unexpected losses.

Expected losses are determined on the basis of the probability of default (PD), assumptions regarding exposure at default (EAD) and the estimated loss given default (LGD). Rating models specific to individual segments are used to determine default probabilities. The rating system for retail and corporate customers as well as banks combines statistical procedures with many years of practical experience in the credit business and incorporates both qualitative and quantitative elements. Country ratings are in principle based on the ratings of external agencies (country ceiling ratings and sovereign default ratings).

A credit portfolio model is used as the basis for the modelling of unexpected losses. Besides default probabilities, exposures in the event of default and loss rates – in particular the correlations between debtors – are significant for the modelling of unexpected losses. In principle, the model covers balance sheet and off-balance-sheet items.

For the valuation of collateral for loans, in particular the calculation of current market and lending values, the corresponding methods, procedure and responsibilities are specified in an extensive set of internal rules. These rules are continually monitored and aligned with regulatory requirements and market changes. For the valuation of mortgage collateral, the bank uses recognised estimation methods that are tailored to the type of property. This includes the use of hedonic models, income capitalisation approaches and expert appraisals. The models used as well as the individual valuations are reviewed on a regular basis. The maximum loan-to-value ratio for mortgages is based on the marketability of the collateral and influenced by factors such as location and type of property (house or commercial property, for example). Marketable collateral (securities, precious metals, account balances, for example) is in principle valued at current market prices. Marketable collateral is subject to the deduction of specified margins. These margins differ primarily depending on the marketable collateral's susceptibility to fluctuations in value.

Limits are used to minimise credit exposures. In addition to the limits at counterparty and counterparty group level, limits are placed on sub-portfolios – for instance for foreign exposures. All credit and contingent exposures are valued each day, while exposures from trading business are valued on a real-time basis. In the case of trading business, pre-deal checks can be undertaken to examine and ensure adherence to counterparty limits. Any breaches of the limits are reported promptly to the officer responsible. An early-warning system is used to identify negative developments and communicate them to the officers responsible. The rating of corporate customers is in principle reviewed once a year on the basis of the annual financial statements. A supplementary review of ratings, limits and exposures in retail and corporate customer business is undertaken using risk-oriented criteria. Ratings, limits and exposures in the banking sector are reviewed periodically and on an extraordinary basis in the event of a deterioration in the credit rating of a particular institution.

**Allowances.** As part of their risk management role, the bank's relationship managers constantly monitor all positions in the credit portfolio to identify any signs of value losses. Should any signs be found, a standardised value loss test is used to determine whether a claim should be classed as impaired. Loans / receivables in respect of which the debtor will unlikely be able to fulfil its future obligations are deemed to be impaired. Where it appears that the bank will be unable to collect all amounts due on a claim, the bank makes an allowance for the unsecured part of the claim, based on creditworthiness. In determining the required allowance, mortgage collateral (including valuation discounts, settlement and holding costs) and marketable collateral (freely tradable securities such as deposits, precious metals, fiduciary investments, etc.) are included at current realisable value. In particular, the stability of other security (e.g. leased assets, sureties) has to be demonstrated. Authority for the approval of the creation of new individual allowances rests with the risk managers. Above a certain amount, the approval of the risk organisation is also required.

Loans on which interest and corresponding commission have not been received in full 90 days after becoming due, and therefore classified as non-performing, are deemed to be impaired and fully adjusted. Although general allowances are made for overdrafts of up to CHF 30,000 and interest outstanding for more than 90 days and the corresponding commission, individual allowances are the norm.

A central, specialist unit handles impaired positions across all customer segments. This unit steers the positions through the stabilisation, restructuring or liquidation process, with regular review of the adjustment requirement for existing allowances.

**Country risks.** The country risk of individual exposures is determined on the basis of the risk domicile where this is not identical to the domicile of the borrower, in accordance with the Swiss Bankers Association's guidelines on the management of country risk. In the case of secured exposures, the risk domicile is determined by taking into account the domicile of the collateral. The risks for each country, total country risks and total country risks outside the best rating category (bank in-house rating categories B to G) are subject to limits, adherence to which is monitored on a constant basis.

**Settlement risk.** A settlement risk arises in the case of transactions with mutual payment and delivery obligations, where Zürcher Kantonalbank must meet its obligations without being able to ensure that counter-payment is also being made. Settlement risk can occur in relation to foreign exchange transactions, securities lending and borrowing (SLB) and OTC repo transactions as well as transactions involving different payment systems and time zones in the interbank sector. Zürcher Kantonalbank's membership to the CLS Bank International Ltd. joint venture a clearing centre for settlement of foreign exchange transactions on a "delivery versus payment" basis helps eliminate a substantial element of the settlement risk arising as a result of foreign exchange trading.

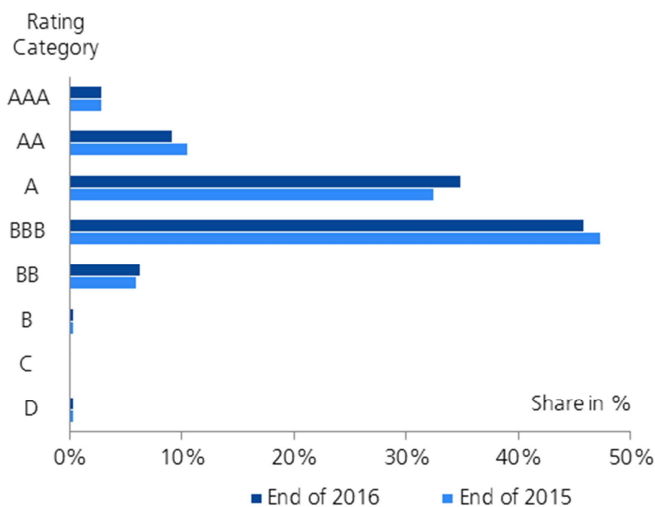
**Risk concentration.** Zürcher Kantonalbank uses an internal, systems-based method for monitoring risk concentration. Besides measurement for the purpose of preparing regulatory reports, risk concentration is restricted at product and customer level using benchmarks that are reflected in the corresponding powers of authorisation. Internal risk concentration reporting includes information on product, sector and individual position concentrations. Due to the bank's anchoring within the Greater Zurich area, the biggest risk concentration in the credit portfolio takes the form of geographical concentration risk.

### 1.3.2 Risk profile

The following sections provide information about the most important sub-portfolios of the credit exposures of Zürcher Kantonalbank on the basis of various criteria. Figure 7, on page 32, in the quantitative part of this disclosure shows credit exposures by counterparty group in accordance with Basel III.

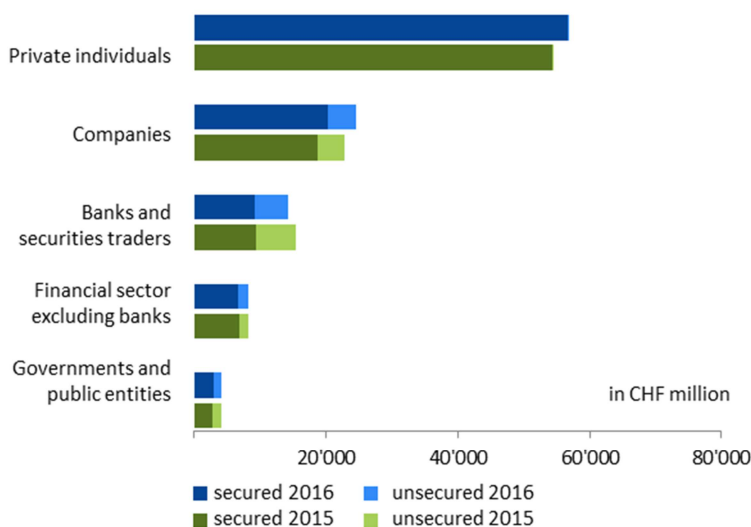
**Credit exposures by rating category.** Default probability ratings are assigned internally on the basis of a scale from 1 to 19. Figure 4 shows credit exposures to counterparties by rating category using S&P's rating scale. There has been a slight shift in the distribution of credit exposures by rating category towards the better rating categories compared with the previous year.

Fig. 4: Credit exposures by rating category



**Credit exposures by customer portfolio.** Figure 5 shows credit exposures classified in accordance with the bank's internally defined customer portfolios.

Fig. 5: Credit exposures by customer portfolio



Credit exposures in relation to “private individuals” consist almost entirely of mortgages and represent 53 percent (2015: 52 percent) of total credit exposures. The “companies” portfolio consists of credit exposures in relation to customers of a commercial nature. The share of this customer group in total credit exposures is 23 percent (2015: 22 percent), 83 percent of which (2015: 82 percent) is secured by mortgage or cash. In the “banks and securities dealers” portfolio, the larger share of credit exposures in volume terms is in the form of collateralised transactions such as reverse repo transactions. Other credit exposures in relation to banks arise as a result of trading operations and from the export financing business. Insurance companies, pension funds, financial holding companies, investment fund companies and similar companies together constitute the “Financial sector excluding banks” portfolio. “Governments and public entities” – the smallest portfolio, with a share of 4 percent of the volume of credit exposures – consists of positions with central banks, central governments and public authorities and institutions.

**Mortgage exposure to private individuals.** Real estate financing for private individuals is part of Zürcher Kantonalbank’s core business. Two-thirds of mortgage exposures relate to owner-occupied residential property. The remaining exposures are secured with rented residential properties or properties that are used for commercial purposes. Mortgage exposure to private individuals increased by 3.9 percent in 2016. The median gross loan-to-value ratio for all properties in the private customer portfolio was 51 percent (2015: 52 percent).

**Unsecured credit exposure.** 75 percent (2015: 78 percent) of unsecured credit exposure in the “companies” portfolio relates to customers in the AAA to BBB (investment grade) rating categories. The volume of unsecured lending in the corporate customers portfolio increased slightly overall.

Fig. 6: Unsecured credit exposures of corporate customers by rating category

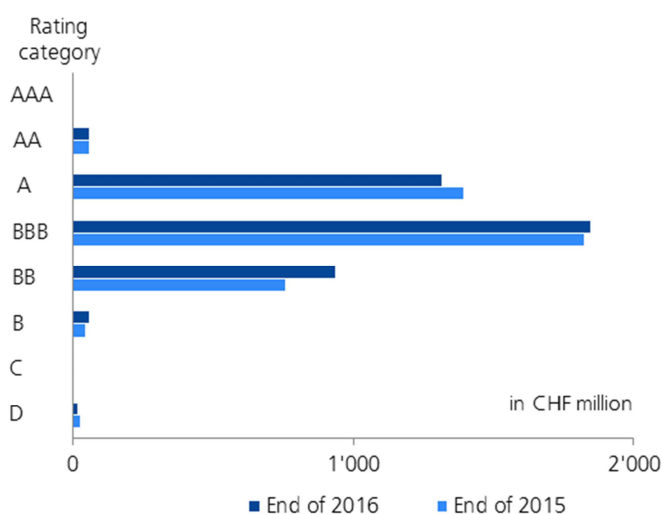
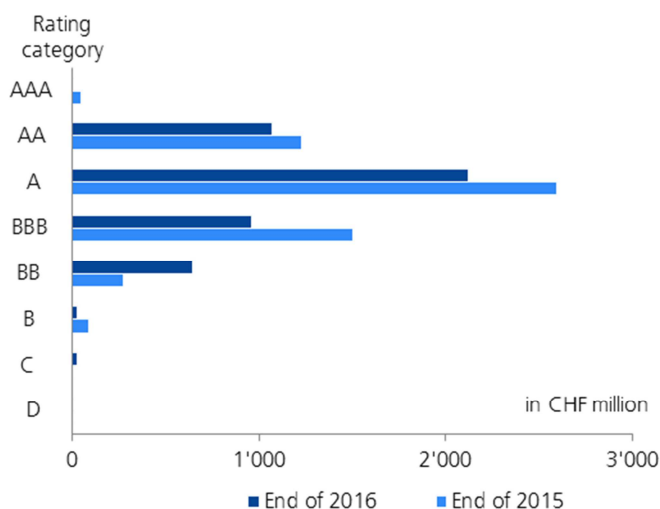


Fig. 7: Unsecured credit exposures of banks and securities traders by rating category



In the "banks and securities traders" customer portfolio, the volume of unsecured loans in the AA and A rating categories fell due to a slight decrease in money market lending and reductions in international trade financing. The volume shift from the BBB rating category to the BB rating category was caused by rating downgrades of banks from emerging markets. 83 percent (2015: 92 percent) of unsecured exposures relate to rating categories AAA to BBB (investment grade).

**Impaired loans.** Impaired loans amounted to CHF 468 million (2015: CHF 466 million). After deduction of the estimated recoverable value of the collateral, there was a net debt of CHF 183 million (2015: CHF 184 million). Risk-weighted, impaired international loans accounted for under 15 percent of the bank's total risk-weighted impaired loans, and for that reason no geographical breakdown is provided.

**Non-performing loans.** The nominal value of non-performing loans amounted to CHF 128 million at the end of the reporting period (2015: CHF 143 million). Loans are classified as non-performing when interest payments, commission, amortisation or the repayment of the principal have not been received in full 90 days after becoming due. This also includes claims against borrowers in liquidation, and loans with special conditions arising from a borrower's financial standing. In addition, non-performing loans are often a component of impaired loans.

**Allowances and provisions.** The volume of allowances and provisions for default risks increased by CHF 3 million to CHF 312 million in 2016.

### 1.3.3 Approach to measuring capital adequacy, accounting for collateral and hedging instruments used for credit risks

Capital adequacy requirements for credit risks are calculated using the international standard approach (SA-BIS). The credit equivalent of derivatives is calculated based on the fair value method, while the financial collateral comprehensive method is used for credit risk mitigation and to calculation of the credit equivalent for repos. In accordance with the regulatory requirements, capital is also required to cover the credit risks arising from financial investments and participations. The capital required for the risk of possible value adjustments due to the counterparty risk on derivatives (CVA risk) is calculated in accordance with the standard approach.

Under Basel III, the risk weightings of counterparties may be calculated on the basis of agency ratings. For the corporate and public-law entity categories, Zürcher Kantonalbank applies the ratings from the agencies Standard & Poor's and Moody's. In the case of the bank and sovereign sectors, Fitch ratings are also taken into account. For securities with an issue-specific rating from Standard & Poor's and Moody's, it is this issue rating that is used.

In accordance with the Capital Adequacy Ordinance, the basis for calculating credit exposures in the case of most transactions is the reported value. In off-balance-sheet transactions, a credit conversion factor is used. Derivative transactions are converted into a credit equivalent and shown after netting.



## 1.4 Market risks in the trading book

Market risks comprise the risk of financial losses on own securities and derivatives as a result of changes in factors that determine the market price, such as share prices, interest rates, volatilities and exchange rates, as well as issuer default.

### 1.4.1 Strategy, organisation and processes for the management of market risks in the trading book

**Strategy.** Zürcher Kantonalbank pursues a strategy focussed on customer transactions for trading business. The individual desks hold trading mandates approved by the risk committee which set out the basic conditions in terms of the objectives pursued, instruments used for underlying and hedging transactions, the form of risk management and the holding period.

**Organisation and processes.** Based on the Three Lines of Defence model, the preventative risk management and risk control functions are separated from risk management at executive board level. The responsibilities of preventative risk management independent of trading and the risk control function downstream include monitoring compliance with risk limits and trading mandates, calculating and analysing the trading income (P&L) and risk figures as well as preventive analysis of potentially high-risk transactions. The risk organisation is also responsible for defining methods of risk measurement, their independent validation and internal and external risk reporting.

Market risk is measured, managed and controlled on the one hand by assigning risk capital in accordance with the capital-at-risk approach and on the other by using value-at-risk limits. It is supplemented by the periodic performance of stress tests and by the monitoring of market liquidity risks. The value of trading positions is determined using the fair value method, whereby marking to market or marking to model, which is subject to stricter rules is applied on a daily basis.

The capital-at-risk for market risk corresponds to the assigned risk capital for the market risks of trading operations on a one-year horizon at a confidence level of 99.9 percent. The modelling is based on a stressed value-at-risk (Stress-VaR). Besides general market risks, the model also takes into account issuer default risks.

Using a Monte Carlo simulation, Zürcher Kantonalbank calculates value-at-risk for a 10-day period and at a confidence level of 99 percent. The loss distribution is arrived at from the valuation of the portfolio using a large number of manufactured scenarios (full valuation). The necessary parameters for determining the scenarios are estimated on the basis of historical market data, whereby more recent observations for the forecasting of volatility are accorded a higher weighting than less recent ones. As a result, value-at-risk responds rapidly to any changing volatility on the markets. Value-at-risk is calculated on a daily basis for the entire trading book. The risks arising from the four groups of risk factors commodities, currencies, interest rates and equities are calculated and shown separately as well as on a combined basis (Fig. 16a in the quantitative part of the disclosure).

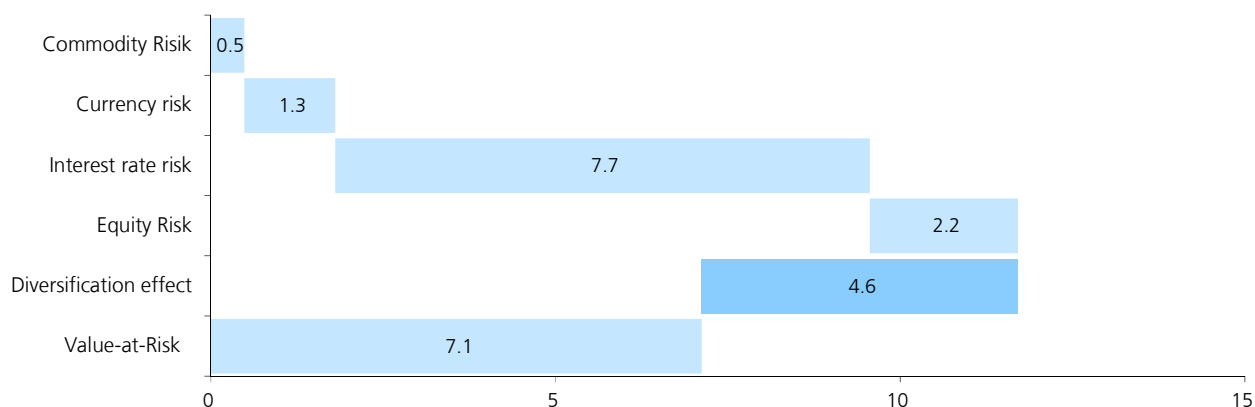
The bank uses different types of scenarios for stress-testing: in matrix scenarios, all market prices and their corresponding volatilities are heavily skewed. Such a scenario might include a 30 percent general fall in equity market prices with a simultaneous 70 percent increase in market volatility. The risk of losses due to general changes in price and volatility can therefore be identified. Non-linearity or asymmetry of risks can be observed in the matrix scenarios. Zürcher Kantonalbank identifies probability-based scenarios which are accorded a 0.1 percent probability of occurring in addition to the matrix scenarios. These scenarios are calculated with increased correlations between risk factors, with a view to taking into account the reduced diversification effect typically observed in an extreme situation.

The bank additionally monitors the market liquidity risk of individual portfolios. In the equity derivatives sector, the potential trading volume resulting from the hedging strategy in the case of a change in the key risk factors is compared with the total market volume. Hypothetical closing-out expenses are calculated for bonds and bond-type products, based on observed bid-ask spreads and taking into account additional pricing supplements/discounts. Large-scale positions are examined regularly to ensure there is sufficient liquidity; valuation reserves are formed if necessary, causing a reduction in core capital in the context of capital adequacy.

The bank performs daily back-testing for the purpose of examining the forecast accuracy of value-at-risk. Regulatory back-testing is based on comparison of value-at-risk for a holding period of one day with the back-testing result. Any breach of limits is notified to the units responsible immediately.

The market risk model is validated annually on the basis of a defined process. Validation includes quantitative as well as qualitative aspects. The focus of the quantitative validation is the back-testing of the risk-factor distribution, while the focus of the qualitative validation is on aspects such as data quality, operation and further development of the model, as well as ongoing plausibility checks on the model results. In addition to the annual review of the model, risks not modelled in the value-at-risk are periodically analysed in a separate process and monitored with regard to materiality.

Fig. 8: Components of value-at-risk (in CHF million)



**Back-testing results 2016:** The quality of the value-at-risk approach used is estimated by comparing the value-at-risk for a holding period of one day with the realised daily back-testing result (Fig. 17 in the quantitative part of the disclosure). In 2016, two breaches of the value-at-risk were recorded. In the case of a one-day holding period and 99-percent quantile, two to three breaches of the value-at-risk are expected each year. The back-testing result therefore corresponds to the statistically expected figure. The first breach was due to the extraordinary market movements following the Brexit decision in the United Kingdom. The second was due to a large movement in money market rates at the end of November.

## 1.4.2 Approach to measuring capital adequacy for market risks in the trading book

The required capital for market risks is calculated based on the internal model-based approach approved by FINMA using the value-at-risk approach. Capital adequacy requirements are based on the market risks in the trading book and exchange rate, precious metals and commodity risks in the banking book. Besides the value-at-risk figures calculated daily, stress-based value-at-risk figures are also included in the calculation of required capital on a weekly basis. The total risk is also calculated using the model approach, although the value changes in risk factors are based on data that were observed in a period with significant market stress for Zürcher Kantonalbank. By contrast, calculation of the required capital for the specific risks of interest rate instruments is performed in accordance with the international standard approach (SA-BIS) valid since of 31 December 2015.

## 1.5 Market risks in the banking book.

### 1.5.1 Strategy, organisation and processes for the management of interest rate risks in the balance sheet

Interest rate risks are the risk that changes in market interest rates will impact negatively on Zürcher Kantonalbank's financial position. As well as affecting current interest income, changes in interest rates have implications for future earnings.

**Strategy.** Zürcher Kantonalbank pursues a strategy focussed on medium-term optimisation of net interest income for the management of the banking book. The interest rate risk is managed based on the market interest method. For customer deposits and loans with a variable interest rate, the interest rate risk is determined by taking into account the bank's presumed future rate-setting behaviour and reviewed at least once a year.

**Organisation and processes.** The interest rate risk in the banking book is managed in strategic terms by the board of directors and in tactical terms by the CFO and treasury. The strategic interest rate risk position is specified by the board of directors on a periodic basis in the form of an investment strategy for equity (equity benchmark). The CFO and treasury manage the deviation of the interest rate risk position in the banking book from the equity benchmark within the risk limits. The Risk unit is responsible for the measurement and monitoring of risk as well as independent reporting on interest rate risk.

The interest rate risk takes account of the present value as well as earnings prospects. With the present value perspective, interest rate risks are managed by allocating risk capital in accordance with the capital-at-risk approach (risk horizon one year, confidence level 99.9 percent) and by using value-at-risk limits (holding period of 20 trading days, confidence level 99 percent). In addition, stress scenarios are simulated in order to analyse and limit the impact of extraordinary changes in the level of interest rates.

With the earnings perspective, stress tests provide an indication of the structural contribution in the case of extraordinary changes in market interest rates with unchanged positioning over a period of one year. Besides the structural contribution, the earnings perspective also includes margin effects, particularly on customer deposits with variable interest. This is particularly true in the environment of negative market interest rates for those balance sheet positions, such as deposit funds from retail customers, which are not burdened with negative interest. Newly implemented monitoring instruments allow the analysis of such margin effects for various interest rate scenarios over several years.

**Risk profile.** The value-at-risk of the interest rate banking book's risk position decreased due to the lower volatility in interest rate markets.

Fig. 9: Value-at-risk of interest rate risk in the banking book

in CHF million	Value-at-Risk (99% quantile)
<b>As at 31 December 2016</b>	<b>-164</b>
As at 31 December 2015	-226

For maturity-related sensitivity figures, please refer to Figure 13 in the quantitative disclosures.

### Strategy, organisation and processes for the management of risks in the investment portfolio

The risks in the investment portfolio comprise issuer risks on debt instruments in financial investments and market risks on equity-type securities and real estate. Interest rate risks are managed and limited as part of asset and liability management.

**Strategy.** The basis of the investment portfolio is mainly operational. Debt securities in financial investments form part of the bank's liquidity buffer, participations mainly relate to companies from the financial market infrastructure and the real estate position consists almost entirely of property in use by the bank.

**Organisation and processes.** There are detailed parameters and competencies for the purchase of financial investments and real estate, as well as for entering into participations. The investment strategy for the financial investments managed by treasury is laid down in a directive approved by the risk committee. Only debt instruments with a first-class credit rating, eligible as high quality liquid assets (HQLA) may be purchased. The Risk unit is responsible for the measurement and monitoring of risk as well as independent reporting on investment portfolio risks.

Risk is managed internally for the investment portfolio by assigning risk capital. For the determination of the risk capital for financial investments and participations, Zürcher Kantonalbank uses an internal model based on a stress period for the risk factors, taking into account diversification effects, liquidity dependencies and the hedgeability of positions. For real estate owned by the bank, risk capital is allocated based on regulatory capital adequacy requirements.

**Risk profile.** The balance sheet value of debt securities in financial investments was CHF 3.9 billion as at 31 December 2016 (2015: CHF 4.1 billion). The portfolio consists of first-class bonds and is diversified in terms of counterparty groups and countries. Guarantees given by central governments in relation to debt securities of banks are in some cases not apparent. It should also be noted that due to regulatory requirements the exposure to central mortgage institution loans is shown in the companies counterparty group.

#### 1.5.2 Approach to measuring capital adequacy for investment portfolio risks

The capital adequacy required for the investment portfolio is calculated using the international standard approach.

## 1.6 Operational risks

Operational risks are potential risks that arise due to the inappropriateness or failure of persons, systems, procedures or due to external events.

### 1.6.1 Strategy, organisation and processes for operational risks

**Strategy.** The objective of Zürcher Kantonalbank's management of operational risk is the risk-oriented protection of people, information, services and assets within its own sphere of responsibility and maintenance and restoration of critical business functions in an operational emergency. The management of operational risk is therefore an essential factor in ensuring that the canton, customers, partners, the public and the regulator can be confident about the services provided by the bank. The assessment of operational risks takes account not only of the direct financial losses but also the consequences of a loss of customer confidence and reputation.

**Organisation and processes.** The bank-wide inventory of operational risks constitutes the basis for the management of operational risks. Through periodic, systematic assessments, the operational risks of all the bank's critical services and service providers are identified, assessed and documented. Bank-wide security management constitutes an important component of the management of operational risks, and comprises four areas of security and corresponding protection objectives:

Security area	Security protection objective
Business Continuity Management	Maintaining critical business functions in the event of serious events stemming from operational risk
Data security	Protecting data confidentiality, integrity and availability
Personal safety	Protecting people (life and limb)
Protection of property	Protecting physical assets

The measurement of operational risks is based on an estimate of potential claims and the probability of occurrence. To calculate the operational risks, inherent risks are set against existing risk-mitigating measures. If the residual risks exceed the risk tolerance, additional risk-mitigating measures are defined. The effectiveness of the risk-mitigating measures is monitored in the context of the bank-wide internal controls system. The specialist function "Operational Risk" of the Risk unit specifies methods and provides tools for monitoring the internal controls system.

**Risk profile.** There was no material change in the bank's risk profile for operating risks compared with the previous year. There were no fundamental changes in the bank's business model or organisational structure. Zürcher Kantonalbank paid particular attention to the identification of operational risk scenarios in relation to cybercrime. The bank's security management is addressing growing threat levels through continuous improvement in protective and defensive measures.

### 1.6.2 Approach to measuring capital adequacy for operational risks

Zürcher Kantonalbank uses the basic indicator approach to determine the required capital for operational risks.

## 1.7 Liquidity and refinancing risks

Liquidity refers to the bank's capacity to discharge its liabilities promptly and unrestrictedly. The liquidity risk is the risk that this capacity to pay will be impaired under institution or market-specific stress conditions.

Refinancing refers to the procurement of funds for the financing of assets. Management of refinancing involves managing the maturity profile of assets and liabilities. Refinancing risk is the risk that the bank is not in a position to procure sufficient funds for the ongoing financing of its lending business on suitable terms.

### 1.7.1 Strategy, organisation and processes for liquidity and refinancing risks

**Strategy.** The objective of the management of liquidity risks is to ensure the capacity to pay even under institution or market-specific stress conditions. Zürcher Kantonalbank pursues a long-term refinancing policy, including both cost and risk aspects.

Refinancing risks are managed via a deliberate diversification with regard to maturities and refinancing instruments and markets used, to limit dependence on funding sources. The treasury uses short and long-term instruments, which are placed on the domestic and international markets. The diversified refinancing base is reflected in a broad product portfolio, comprising customer deposits, bank deposits and capital market refinancing.

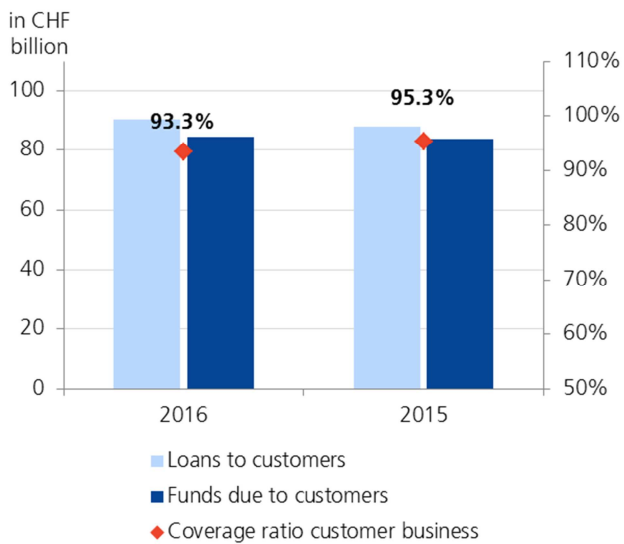
**Organisation and processes.** The "Treasury" organisational unit is responsible for managing the liquidity risks and refinancing of Zürcher Kantonalbank. It reports to the CFO. Treasury delegates operational liquidity management to money market trading; this organisation ensures the efficient use of liquidity based on regulatory and internal rules. Within the framework of risk policy parameters, the board of directors establishes the liquidity risk tolerance based on the internal model. The risk organisation oversees compliance with the rules and reports to the board of directors on this on a regular basis.

The measurement, management and control of short-term liquidity risks is based on both the internal model and the regulatory indicator, the Liquidity Coverage Ratio (LCR). The basis for the internal model is a bank-specific stress scenario, tailored to the properties of Zürcher Kantonalbank. In this scenario an assumption is made of substantial outflows with different intensities in the customer and interbank business. The result of the liquidity risk measurement is a daily report, prepared automatically, on the net liquidity position, the availability of liquid assets and securities eligible for repo transactions in financial investments and trading positions as well as the liquidity inflows and outflows under the stress scenario. As a systemically important bank, with effect from 1 January 2015, Zürcher Kantonalbank is subject to a minimum requirement of 100 percent for the LCR. Zürcher Kantonalbank uses an internal model in accordance with marginal note 225 of FINMA Circular 2015/2, Liquidity Risks for Banks, for the division of wholesale deposits into operative and non-operative units. Net outflows of funds from derivatives are calculated based on changes in fair value according to a look-back method in accordance with marginal note 262 of the Circular. Besides Swiss francs, which make up by far the largest part of the balance sheet of Zürcher Kantonalbank, the LCR is also monitored and periodically reported in other major currencies. The management of liquidity risks also involves an emergency plan. This supports the situationally appropriate conduct of the relevant functions in a crisis.

**Risk profile.** The liquidity ratios moved within a stable framework in 2016. The quarterly averages of the LCR are listed in the quantitative part of this disclosure, in figure 15 on page 41. They are between 116 and 132 percent. The high quality liquid assets (HQLA) are between CHF 34.3 billion and CHF 41.0 billion. These can be subdivided into Level 1 assets (cash, central bank deposits, tradeable securities) and Level 2 assets (tradeable securities with less strict criteria). The majority of Level 1 assets are held in the form of central bank deposits. The liquidity profile is actively managed, in particular by the targeted management of fixed-term deposits and the SLB and repo business. The change in the LCR is driven by fluctuations in the area of non-operative deposits and the SLB and repo business with banks and major customers.

The figure below shows a year-on-year comparison of the coverage ratio for asset-side customer business. Loans to customers totalled CHF 90.6 billion as at 31 December 2016, against funds due to customers of CHF 84.6 billion. This gives a coverage ratio of 93.3 percent. The coverage ratio has reduced slightly versus the previous year on account of the increased mortgage volumes.

Fig. 10 Coverage ratio customer business



## 2 Quantitative disclosures

The table below provides an overview of the capital adequacy and liquidity disclosure requirements as at 31 December 2016.

Refers to Circular 08/22 unless stated otherwise	Information to be disclosed	Applicable to ZKB	Systemic importance disclosures	Required frequency as per FINMA Circular	Effective frequency of disclosure	Disclosure report reference
Rz 23	Key characteristics of eligible regulatory capital instruments	yes	no	yes/in event of change	Q	Fig. 11
Rz 38	Breakdown of eligible regulatory capital	yes	no	HY	Q	Fig. 1, 3, 4a-c
Rz 39	Required capital	yes	no	HY	Q	Fig. 2, 5a-b, 6a-b
Rz 40	Credit risk/breakdown by counterparty or sector	yes	no	HY	Q	Fig. 7
Rz 41	Regulatory credit risk mitigation	yes	no	HY	Q	Fig. 8
Rz 42	Segmentation of credit risks	yes	no	HY	Q	Fig. 9
Rz 43	Geographical credit risks	no	no	n/a	n/a	n/a
Rz 44	Doubtful customer loans by geographical area	no	no	n/a	n/a	n/a
Rz 45	Credit derivative transactions in the banking book	yes	no	HY	Q	Fig. 10
Rz 45.1	Volume of risk-weighted positions when using external ratings	yes	no	HY	Q	Fig. 12
Rz 46	Interest rate risks in the banking book: figures on the asset effect and income effect in the event of an interest rate shock	yes	no	HY	Q	Fig. 13
Rz 46.1	Leverage ratio	yes	no	HY	Q	Fig. 14
Rz 46.3	Liquidity coverage ratio	no	no	n/a	n/a	n/a
Rz 46.2 – Rz 46.4 – Rz 46.6	Liquidity coverage ratio (group)	yes	stricter requirements from 1 January 2017	HY	Q	Fig. 15
Rz 47 – Rz 47.4	Disclosure requirements under Basel Minimum Standards when using:					
	▪ bank-specific calculations for credit risks	no	no	n/a	n/a	n/a
	▪ model-based approach for market risks	yes	no	HY	Q	Fig. 16 a-b Fig. 17
	▪ institution-specific approach for operating risks	no	no	n/a	n/a	n/a
	▪ securitisation transactions as defined in FINMA Circular 08/19	no	no	n/a	n/a	n/a



Refers to Circular 08/22 unless stated otherwise	Information to be disclosed	Applicable to ZKB	Systemic importance disclosures	Required Frequency as per FINMA Circular	Effective frequency of disclosure	Disclosure report reference
Rz 42, (FINMA-RS 2016/1)	As per marginal note 42, large banks must publish additional information pursuant to Annex 4 to Circular 2016/1. This should be done at the group level and for the main domestic and foreign bank subsidiaries and subgroups which must comply with capital and liquidity requirements.	yes	no	Q	Q	Fig. 20
Rz 59.0	Banks with a total exposure greater than EUR 200 million → have additional disclosure obligations to meet	no	no	n/a	n/a	n/a
Rz 49 (FINMA-RS 2016/1)	Systemically important banks must disclose information pursuant to Annex 5 to Circular 2016/1. This requirement relates to the finance group, the single entity as well as to significant domestic bank subsidiaries and subgroups which must comply with capital requirements.	yes	yes	Q	Q	Fig. 18 Fig. 19
Rz 53 (FINMA-RS 2016/1)	Listing and qualification of relief granted to RWAs, eligible capital and total exposure at individual institution level, stating the materiality of their impacts/importance etc.	no	no	n/a	n/a	n/a

## 2.1 Change in eligible and required capital

Fig. 1: Change in eligible capital (in CHF million)

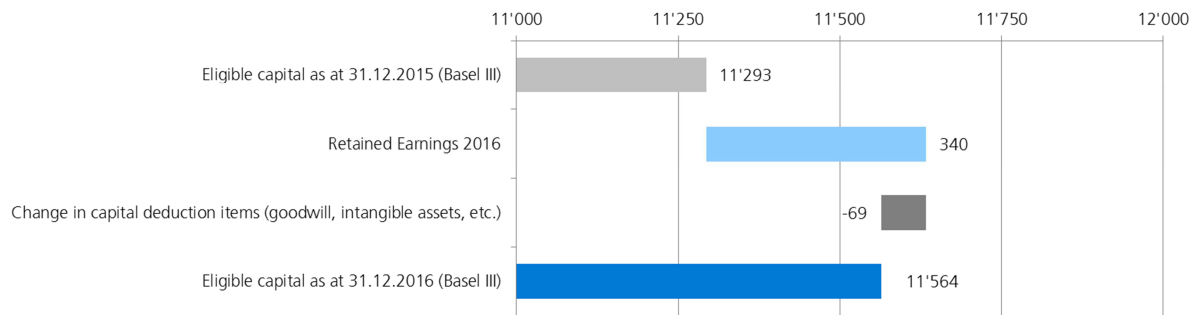
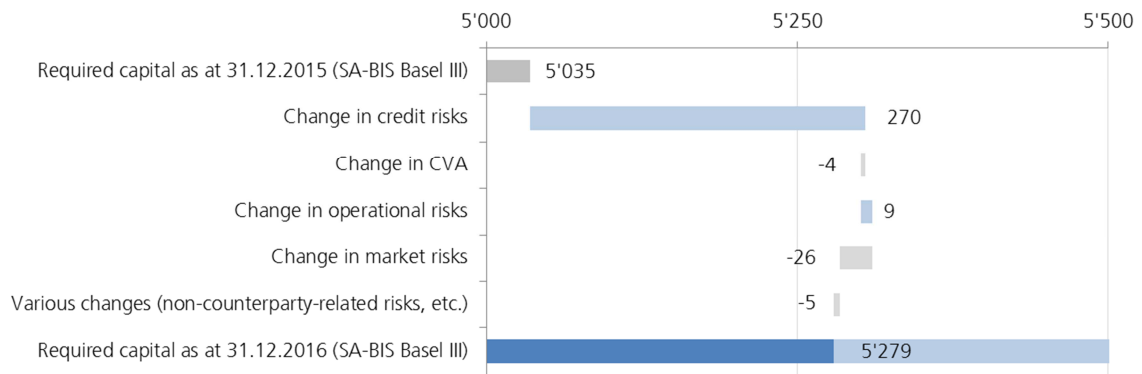


Fig. 2: Change in required minimum capital (in CHF million)



## 2.2 Eligible and required capital as well as capital ratios

The tables below provide information on the detailed composition of and changes in eligible and required capital.

Fig. 3: Group balance sheet before distribution of net profit

<i>in CHF million</i>	References to Fig. 4a	31.12.2016 <sup>1</sup>	31.12.2015 <sup>1</sup>
<b>Assets</b>			
Liquid assets		35'336	32'497
Amounts due from banks		5'364	6'011
Amounts due from securities financing transactions		14'889	14'966
Amounts due from customers		7'509	7'673
Mortgage loans		77'275	73'623
Trading portfolio assets		9'472	10'226
Positive replacement values of derivative financial instruments		1'933	2'897
Other financial instruments at fair value		20	220
Financial investments		4'156	4'320
Accrued income and prepaid expenses		360	294
Non-consolidated participations		179	161
Tangible fixed assets		804	860
Intangible assets		168	124
- of which goodwill	A	165	121
- of which other intangible assets	B	3	3
Other assets		520	538
- of which deferred tax assets which rely on future profitability	C	9	9
<b>Total assets</b>		<b>157'985</b>	<b>154'410</b>
<b>Liabilities and equity</b>			
<b>Liabilities</b>			
Amounts due to banks		34'137	34'803
Liabilities from securities financing transactions		5'084	2'991
Amounts due in respect of customer deposits		80'890	80'820
Trading portfolio liabilities		2'656	2'110
Negative replacement values of derivative financial instruments		1'551	2'067
Liabilities from other financial instruments at fair value		3'100	4'163
Cash bonds		235	269
Bonds		9'329	7'669
Central mortgage institution loans		8'384	7'716
Accrued expenses and deferred income		683	578
Other liabilities		506	211
Provisions		636	584
- of which deferred tax on valuation differences		0	0
<b>Total liabilities</b>		<b>147'191</b>	<b>143'981</b>
- of which subordinated liabilities eligible as additional Tier 1 capital (AT1) <sup>2</sup>	D	583	589
- of which subordinated liabilities eligible as supplementary capital (T2) <sup>3</sup>	E	714	721
- of which collective value adjustments for default risks, eligible as supplementary capital (T2)	F		14
<b>Net equity</b>			
Bank capital		2'425	2'425
- of which eligible as CET1	G	2'425	2'425
Voluntary retained earnings reserve	H	7'686	7'290
Foreign currency translation reserve	I	-8	-8
Group net income		691	722
- of which minority interests			
- of which retained earnings	J	340	396
<b>Total equity</b>		<b>10'793</b>	<b>10'429</b>
<b>Total liabilities and equity</b>		<b>157'985</b>	<b>154'410</b>

<sup>1</sup> The regulatory scope of consolidation pursuant to the Capital Adequacy Ordinance is identical to that used in accounting.

<sup>2</sup> Consists solely of high-trigger convertible capital.

<sup>3</sup> Consists solely of low-trigger convertible capital.

Fig. 4a: Eligible capital (group)<sup>1</sup>

in CHF million

References to Fig. 3

31.12.2016<sup>2</sup>31.12.2015<sup>2</sup>

<b>Common equity Tier 1 (CET1)</b>			
Issued and paid-up corporate capital, fully eligible	G	2'425	2'425
Profit reserves / profit (loss) brought forward	H+J	8'026	7'686
Capital reserves and foreign currency translation reserve	I	-8	-8
<b>Common equity Tier 1 before adjustments</b>		<b>10'443</b>	<b>10'103</b>
<b>Adjustments to common equity Tier 1</b>			
Goodwill	A	-165	-121
Other intangible assets	B	-3	-3
Deferred tax assets which rely on future profitability	C	-9	-9
<b>Total adjustments to common equity Tier 1</b>		<b>-177</b>	<b>-133</b>
<b>Common equity Tier 1 (net CET1)</b>		<b>10'266</b>	<b>9'970</b>
<b>Additional Tier 1 capital (AT1)</b>			
Issued and paid up debt instruments <sup>3</sup>		590	590
Deduction of net long positions in own AT1 instruments		-7	-1
<b>Additional Tier 1 capital (net AT1)</b>	D	<b>583</b>	<b>589</b>
<b>Core capital (net Tier 1)</b>		<b>10'849</b>	<b>10'559</b>
<b>Supplementary capital (Tier 2)</b>			
Issued and paid up debt instruments <sup>4</sup>	E	721	729
Deduction of net long positions in own Tier 2 instruments	E	-7	-8
General bad debt provision for inherent default risks	F		14
<b>Supplementary capital (net Tier 2)</b>		<b>714</b>	<b>735</b>
<b>Regulatory total capital (net Tier 1 &amp; net Tier 2)</b>		<b>11'564</b>	<b>11'293</b>

<sup>1</sup> Unused headings in accordance with model table 1b) of Appendix 2 FINMA Circular 2008/22 "Capital Adequacy Disclosure – Banks" are omitted in favour of a more straightforward presentation.

<sup>2</sup> Figures for capital are calculated in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 – 142 CAO, which allow a gradual introduction of the new rules.

<sup>3</sup> Consists solely of high-trigger convertible capital.

<sup>4</sup> Consists solely of low-trigger convertible capital.

Fig. 4b: Eligible capital (parent company)<sup>1,2,3</sup>

<i>in CHF million</i>	31.12.2016 <sup>4</sup>	31.12.2015 <sup>4</sup>
<b>Common equity Tier 1 (CET1)</b>		
Issued and paid-up corporate capital, fully eligible	2'425	2'425
Profit reserves, including reserves for general banking risks / profit (loss) brought forward	8'089	7'724
Capital reserves and foreign currency translation reserve		
<b>Common equity Tier 1 before adjustments</b>	<b>10'514</b>	<b>10'149</b>
<b>Adjustments to common equity Tier 1</b>		
Goodwill		
Other intangible assets	-3	-3
Deferred tax assets which rely on future profitability		
Consolidated participations (CET1 instruments)	-447	-402
<b>Total adjustments to common equity Tier 1</b>	<b>-450</b>	<b>-405</b>
<b>Common equity Tier 1 (net CET1)</b>	<b>10'064</b>	<b>9'744</b>
<b>Additional Tier 1 capital (AT1)</b>		
Issued and paid-up debt instruments <sup>5</sup>	590	590
Deduction of net long positions in own AT1 instruments	-7	-1
<b>Additional Tier 1 capital (net AT1)</b>	<b>583</b>	<b>589</b>
<b>Core capital (net Tier 1)</b>	<b>10'647</b>	<b>10'333</b>
<b>Supplementary capital (Tier 2)</b>		
Issued and paid-up debt instruments <sup>6</sup>	721	729
Deduction of net long positions in own Tier 2 instruments	-7	-8
General bad debt provision for inherent default risks		14
<b>Supplementary capital (net Tier 2)</b>	<b>714</b>	<b>735</b>
<b>Regulatory total capital (net Tier 1 &amp; net Tier 2)</b>	<b>11'362</b>	<b>11'068</b>

<sup>1</sup> Unused headings in accordance with model table 1b) of Appendix 2 FINMA Circular 2008/22 "Capital Adequacy Disclosure – Banks" are omitted in favour of a more straightforward presentation.

<sup>2</sup> The parent company's capital is calculated on a solo consolidated basis from 31 December 2012. Under Art. 10 para. 3 CAO, FINMA can allow a bank to consolidate group companies operating in the financial sector at individual institution level (solo consolidation) on account of their particularly close relationship to the bank. FINMA has ruled that Zürcher Kantonalbank may consolidate the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd. on a solo basis under the individual institution provisions from 2012.

<sup>3</sup> Zürcher Kantonalbank does not claim any relief on the basis of Art. 125 CAO.

<sup>4</sup> Figures for capital are calculated in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 – 142 CAO, which allow a gradual introduction of the new rules.

<sup>5</sup> Consists solely of high-trigger convertible capital.

<sup>6</sup> Consists solely of low-trigger convertible capital.

Fig. 4c: Thresholds and positions with no deduction from common equity Tier 1 (CET1) (group)<sup>1</sup>

<i>in CHF million</i>	31.12.2016		31.12.2015	
	Amount <sup>2</sup>	Threshold	Amount <sup>2</sup>	Threshold
Non-qualified participations in the share capital of other companies in the financial sector	319	1'027 <sup>3</sup>	470	999 <sup>3</sup>
Qualified participations in the share capital of other companies in the financial sector	313	1'027 <sup>4</sup>	205	999 <sup>4</sup>

<sup>1</sup> Amounts below the threshold are subject to normal capital adequacy requirements. Zürcher Kantonalbank does not have any "mortgage servicing rights" or "other deferred tax assets".

<sup>2</sup> Net position (trading and banking book) for equity instruments of companies operating in the financial sector (Art. 52 CAO).

<sup>3</sup> Threshold 1 pursuant to Art. 35 para. 2 CAO.

<sup>4</sup> Threshold 2 pursuant to Art. 35 para. 3 CAO.

Fig. 5a: Required capital (group)

<i>in CHF million</i>	Remarks	31.12.2016 SA-BIS	31.12.2015 SA-BIS
Credit risks (using standard approach)	including CVA <sup>1</sup>	4'561	4'296
- of which price risk relating to equity-type securities in the banking book		29	25
Non-counterparty-related risks (using standard approach)		64	69
Market risks		326	353
- of which market risks (using model-based approach) <sup>2,4</sup>		163	214
- of which market risks on interest rate instruments (specific market risks) <sup>3,4</sup>		163	139
Operational risks (using basic indicator approach)		327	318
<b>Minimum required capital</b>		<b>5'279</b>	<b>5'035</b>
<b>Total risk-weighted assets</b>	12.5 x minimum capital	<b>65'987</b>	<b>62'942</b>

<sup>1</sup> The capital adequacy requirements for the risk of possible value adjustments due to the counterparty credit risk on derivatives (CVA risk) are calculated in accordance with the standard approach and amounted to CHF 194 million as at 31 December 2016 (CHF 198 million as at 31 December 2015).

<sup>2</sup> Excludes specific interest rate risks; aggregate value-at-risk (VaR) from average of the 60 immediately preceding trading days and stress-based VaR from average of the 12 immediately preceding weeks.

<sup>3</sup> Specific risks due to interest rates (from interest rate instruments, options and credit derivatives).

<sup>4</sup> The values have been inverted in the report of 2015.

Fig. 5b: Required capital (parent company)<sup>1</sup>

<i>in CHF million</i>	Remarks	31.12.2016 SA-BIS	31.12.2015 SA-BIS
Credit risks (using standard approach)	including CVA <sup>2</sup>	4'552	4'286
- of which price risk relating to equity-type securities in the banking book		29	25
Non-counterparty-related risks (using standard approach)		64	68
Market risks		326	353
- of which market risks (using model-based approach) <sup>3,5</sup>		163	214
- of which market risks on interest rate instruments (specific market risks) <sup>4,5</sup>		163	139
Operational risks (using basic indicator approach)		316	304
<b>Minimum required capital</b>		<b>5'259</b>	<b>5'010</b>
<b>Total risk-weighted assets</b>	12.5 x minimum capital	<b>65'731</b>	<b>62'626</b>

<sup>1</sup> The parent company's capital is calculated on a solo consolidated basis from 31 December 2012. Under Art. 10 para. 3 CAO, FINMA can allow a bank to consolidate group companies operating in the financial sector at individual institution level (solo consolidation) on account of their particularly close relationship to the bank. FINMA has ruled that Zürcher Kantonalbank may consolidate the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd. on a solo basis under the individual institution provisions from 2012.

<sup>2</sup> The capital adequacy requirements for the risk of possible value adjustments due to the counterparty credit risk on derivatives (CVA risk) are calculated in accordance with the standard approach and amounted to CHF 194 million as at 31 December 2016 (CHF 198 million as at 31 December 2015).

<sup>3</sup> Excludes specific interest rate risks; aggregate value-at-risk (VaR) from average of the 60 immediately preceding trading days and stress-based VaR from average of the 12 immediately preceding weeks.

<sup>4</sup> Specific risks due to interest rates (from interest rate instruments, options and credit derivatives).

<sup>5</sup> The values have been inverted in the report of 2015.

Fig. 6a: Capital ratios in accordance with Basel III (Switzerland) (group)

	Remarks	31.12.2016 <sup>1</sup>	31.12.2015 <sup>1</sup>
<b>Common equity Tier 1 ratio (CET1)</b>	based on minimum capital (8%)	<b>15.6%</b>	<b>15.8%</b>
<b>Additional Tier 1 capital ratio (AT1)</b>	based on minimum capital (8%)	<b>0.9%</b>	<b>0.9%</b>
<b>Core capital ratio (Tier 1 = CET1 + AT1)</b>	based on minimum capital (8%)	<b>16.4%</b>	<b>16.8%</b>
<b>Supplementary capital ratio (Tier 2)</b>	based on minimum capital (8%)	<b>1.1%</b>	<b>1.2%</b>
<b>Total capital ratio (Tier 1 + Tier 2)</b>	based on minimum capital (8%)	<b>17.5%</b>	<b>17.9%</b>
<hr/>			
CET1 requirements pursuant to Basle Minimum Standards (minimum requirements + capital buffer + countercyclical buffer + the capital buffer for global systemically important institutions (in % of risk-weighted assets)		5.8%	5.2%
- of which capital buffer pursuant to Basle Minimum Standards (in % of risk-weighted assets) <sup>2</sup>		0.6%	
- of which countercyclical buffer (in % of risk-weighted assets) <sup>3</sup>		0.7%	0.7%
- of which capital buffer for global systemically important institutions in accordance with the Basel parameters (in % of risk-weighted assets)		-	-
Available CET1 to meet minimum and buffer requirements, after deduction of AT1 and Tier 2 requirements <sup>4</sup> , which are met through CET1 (in % of risk-weighted assets)		14.0%	14.4%
<hr/>			
CET1 target <sup>5</sup> plus countercyclical buffer (in % of risk-weighted assets)		10.7%	10.7%
Available CET1 to meet target plus countercyclical buffer, after deduction of AT1 and Tier 2 requirements <sup>6</sup> , which are met through CET1 (in % of risk-weighted assets)		13.4%	13.8%
<hr/>			
Tier 1 target plus countercyclical buffer (in % of risk-weighted assets)		13.7%	13.7%
Available Tier 1 to meet target plus countercyclical buffer, after deduction of Tier 2 requirements, which are met through Tier 1 (in % of risk-weighted assets)		16.4%	16.8%
<hr/>			
Regulatory capital target plus countercyclical buffer (in % of risk-weighted assets)		14.7%	14.7%
Available regulatory capital to meet target plus countercyclical buffer (in % of risk-weighted assets)		17.5%	17.9%

<sup>1</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 – 142 CAO, which allow a gradual introduction of the new rules.

<sup>2</sup> Based on the transitional provisions specified in the Basle Minimum Standards, the capital buffer for 2015 is 0.0 % and 0.625% für 2016 respectively.

<sup>3</sup> The basis for the countercyclical capital buffer is mortgage lending for the financing of residential property in Switzerland. Since 30 June 2014, this has been 2.0 % of the corresponding risk-weighted assets and amounted to CHF 453 million as at 31 December 2016 (CHF 432 million as at 31 December 2015).

<sup>4</sup> AT1 requirement 2.0 %, Tier 2 requirement 2.6 % (Appendix 8 CAO).

<sup>5</sup> Derived from the FINMA decree of August 2014, the CET1 target for Zürcher Kantonalbank is 10.0 % from 31 December 2014.

<sup>6</sup> Derived from the FINMA decree of August 2014, the AT1 target for Zürcher Kantonalbank is 3.0 % and the Tier 2 target 1.0 % from 31 December 2014.

Fig. 6b: Capital ratios in accordance with Basel III (Switzerland) (parent company)

	Remarks	31.12.2016 <sup>1</sup>	31.12.2015 <sup>1</sup>
<b>Common equity Tier 1 ratio (CET1)</b>	based on minimum capital (8%)	<b>15.3%</b>	<b>15.6%</b>
<b>Additional Tier 1 capital ratio (AT1)</b>	based on minimum capital (8%)	<b>0.9%</b>	<b>0.9%</b>
<b>Core capital ratio (Tier 1 = CET1 + AT1)</b>	based on minimum capital (8%)	<b>16.2%</b>	<b>16.5%</b>
<b>Supplementary capital ratio (Tier 2)</b>	based on minimum capital (8%)	<b>1.1%</b>	<b>1.2%</b>
<b>Total capital ratio (Tier 1 + Tier 2)</b>	based on minimum capital (8%)	<b>17.3%</b>	<b>17.7%</b>
CET1 requirements pursuant to CAO (minimum requirements + capital buffer + countercyclical buffer) plus the capital buffer for global systemically important institutions in accordance with the Basel parameters (in % of risk-weighted assets)			
		5.8%	5.2%
- of which capital buffer pursuant to Basle Minimum Standards (in % of risk-weighted assets) <sup>2</sup>			
		0.6%	
- of which countercyclical buffer (in % of risk-weighted assets) <sup>3</sup>			
		0.7%	0.7%
- of which capital buffer for global systemically important institutions in accordance with (in % of risk-weighted assets)			
		-	-
Available CET1 to meet minimum and buffer requirements, after deduction of AT1 and Tier 2 requirements <sup>4</sup> , which are met through CET1 (in % of risk-weighted assets)			
		13.8%	14.2%
CET1 target <sup>5</sup> plus countercyclical buffer (in % of risk-weighted assets)			
		10.7%	10.7%
Available CET1 to meet target plus countercyclical buffer, after deduction of AT1 and Tier 2 requirements <sup>6</sup> , which are met through CET1 (in % of risk-weighted assets)			
		13.2%	13.5%
Tier 1 target plus countercyclical buffer (in % of risk-weighted assets)			
		13.7%	13.7%
Available Tier 1 to meet target plus countercyclical buffer, after deduction of Tier 2 requirements, which are met through Tier 1 (in % of risk-weighted assets)			
		16.2%	16.5%
Regulatory capital target plus countercyclical buffer (in % of risk-weighted assets)			
		14.7%	14.7%
Available regulatory capital to meet target plus countercyclical buffer (in % of risk-weighted assets)			
		17.3%	17.7%

<sup>1</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 – 142 CAO, which allow a gradual introduction of the new rules.

<sup>2</sup> Based on the transitional provisions specified in the Basle Minimum Standards, the capital buffer for 2015 is 0.0 % and 0.625% für 2016 respectively.

<sup>3</sup> The basis for the countercyclical capital buffer is mortgage lending for the financing of residential property in Switzerland. Since 30 June 2014, this has been 2.0 % of the corresponding risk-weighted assets and amounted to CHF 453 million as at 31 December 2016 (CHF 432 million as at 31 December 2015).

<sup>4</sup> AT1 requirement 2.0 %, Tier 2 requirement 2.6 % (Appendix 8 CAO).

<sup>5</sup> Derived from the FINMA decree of August 2014, the CET1 target for Zürcher Kantonalbank is 10.0% from 31 December 2014.

<sup>6</sup> Derived from the FINMA decree of August 2014, the AT1 target for Zürcher Kantonalbank is 3.0 % and the Tier 2 target 1.0 % from 31 December 2014.



## 2.3 Credit risks

The following tables provide information about various aspects relating to credit risks.

Fig. 7: Group credit exposure breakdown by counterparty group

Credit exposures <sup>1</sup> in CHF million	Central governments and central banks	Banks and securities dealers	Other institutions <sup>2</sup>	Companies	Retail customers and small businesses <sup>3</sup>	Other positions <sup>4</sup>	Total
<b>Balance sheet items</b>							
Amounts due from banks	15	5'348		1		0	<b>5'364</b>
Amounts due from securities financial transactions	204	8'831	2'800	3'054			<b>14'889</b>
Amounts due from customers	2	0	993	4'382	2'026	107	<b>7'509</b>
Mortgage loans			44	4'830	70'606	1'795	<b>77'275</b>
Positive replacement values of derivative financial instruments	83	594	128	465	575	88	<b>1'933</b>
Other financial instruments at fair value		20					<b>20</b>
Debt securities in financial investments	572	696	1'140	1'528	209		<b>4'145</b>
Accrued income and prepaid expenses						360	<b>360</b>
Other assets <sup>5</sup>	116					80	<b>196</b>
<b>Total as at 31.12.2016</b>	<b>992</b>	<b>15'488</b>	<b>5'105</b>	<b>14'260</b>	<b>73'416</b>	<b>2'431</b>	<b>111'692</b>
<b>Total as at 31.12.2015</b>	<b>1'232</b>	<b>16'013</b>	<b>5'195</b>	<b>15'375</b>	<b>69'834</b>	<b>2'297</b>	<b>109'946</b>
<b>Off-balance-sheet transactions</b>							
Contingent liabilities	6	1'227	83	2'804	339	24	<b>4'483</b>
Irrevocable commitments <sup>6</sup>	3	100	317	5'102	1'901	82	<b>7'506</b>
Liabilities for calls on shares and other equities						233	<b>233</b>
Credit commitments							
<b>Total as at 31.12.2016</b>	<b>9</b>	<b>1'327</b>	<b>400</b>	<b>7'906</b>	<b>2'240</b>	<b>340</b>	<b>12'222</b>
<b>Total as at 31.12.2015</b>	<b>8</b>	<b>1'171</b>	<b>407</b>	<b>7'877</b>	<b>1'786</b>	<b>227</b>	<b>11'477</b>

<sup>1</sup> The counterparty groups correspond to those in the Capital Adequacy Ordinance (CAO). Cash, non-counterparty-related assets and exposure with equity-type characteristics are not stated under credit exposure.

<sup>2</sup> This group includes public authorities and institutions, the Bank for International Settlements (BIS), the International Monetary Fund (IMF), multilateral development banks and joint institutions.

<sup>3</sup> Small businesses are defined by Zürcher Kantonalbank as all companies that meet at least one of the following conditions: number of employees < 50, total assets < CHF 6 million, net sales < CHF 15 million.

<sup>4</sup> E.g. foundations or deferred items.

<sup>5</sup> Excludes equalising accounts for value adjustments not recognised in the income statement and deferred tax assets which rely on future profitability.

<sup>6</sup> Irrevocable commitments are disclosed in accordance with the definition specified in the Capital Adequacy Ordinance (CAO). Due to the different measurement criteria, the total may differ from the total under the accounting guidelines for banks (AGB) (group balance sheet).

The following tables show the credit exposures by type of collateral in accordance with the Capital Adequacy Ordinance. The transactions subject to capital adequacy rules are primarily calculated based on the values reported in the balance sheet. In off-balance-sheet transactions, a credit conversion factor is used. Derivative transactions are converted into a credit equivalent and shown after netting. Therefore, the total credit exposures are not identical to those in the table "Group credit exposure breakdown by counterparty group".

Fig. 8: Regulatory group credit risk mitigation

<i>in CHF million</i>	Secured by guarantees	Secured by real estate	Financial collateral <sup>1</sup>	Other credit exposures	<b>Total</b>
<b>Credit exposures<sup>2</sup></b>					
Central governments and central banks	1			970	971
- of which derivatives <sup>3</sup>				261	261
Banks and securities traders <sup>4</sup>	709		0	13'294	14'004
- of which derivatives <sup>3</sup>				3'115	3'115
Other institutions	151	44		2'930	3'125
- of which derivatives <sup>3</sup>				304	304
Companies <sup>4</sup>	356	4'639	1'220	10'180	16'394
- of which derivatives <sup>3</sup>				1'349	1'349
Private customers and small businesses	219	70'179	719	3'553	74'669
- of which derivatives <sup>3</sup>				673	673
Other positions		1'783	16	36'365	38'164
- of which derivatives <sup>3</sup>				207	207
<b>Total as at 31 December 2016</b>	<b>1'436</b>	<b>76'644</b>	<b>1'955</b>	<b>67'293</b>	<b>147'328</b>
<b>Total as at 31 December 2015</b>	<b>1'312</b>	<b>73'002</b>	<b>1'684</b>	<b>63'181</b>	<b>139'178</b>

<sup>1</sup> Effective 31 December 2012, risk is mitigated using the financial collateral comprehensive method. Financial collateral is recognised at the net value after taking into account supervisory haircuts.

<sup>2</sup> The counterparty groups correspond to those in the Capital Adequacy Ordinance (CAO). Non-counterparty-related assets and exposures with equity-type characteristics are not stated under credit exposure. Credit exposures are shown after netting based on equity. Off-balance-sheet items were converted into their credit equivalents.

<sup>3</sup> The fair value method was used to calculate the credit equivalents on derivatives.

<sup>4</sup> Includes exposures vis-à-vis qualified central counterparties (CHF 2'013 million).

Fig. 9: Group credit exposure breakdown by risk weighting category

<i>in CHF million</i>	0%	2%	20%	35%	50%	75%	100%	150%	250%	Deduction	<b>Total</b>
<b>Credit exposure after provision of collateral <sup>1</sup></b>											
Central governments and central banks	1'916				0		205				2'122
- of which derivatives <sup>2</sup>	58						202				261
Banks and securities traders <sup>3</sup>		880	6'486		5'352		603	99			13'420
- of which derivatives <sup>2</sup>		386	645		2'059		22	3			3'115
Other institutions	594		805	27	972		642	0			3'039
- of which derivatives <sup>2</sup>	84		61		37		123				304
Companies <sup>3</sup>		1'133	674	2'481	649	50	9'906	20			14'912
- of which derivatives <sup>2</sup>		386	34		163		766				1'349
Private customers and small businesses				59'833		1'765	12'053	80			73'731
- of which derivatives <sup>2</sup>							673				673
Other positions	35'336			921		18	1'872	1			38'148
- of which derivatives <sup>2</sup>							207				207
<b>Total as at 31 December 2016</b>	<b>37'846</b>	<b>2'013</b>	<b>7'964</b>	<b>63'262</b>	<b>6'974</b>	<b>1'833</b>	<b>25'281</b>	<b>200</b>			<b>145'373</b>
<b>Total as at 31 December 2015</b>	<b>35'233</b>	<b>2'575</b>	<b>7'567</b>	<b>60'410</b>	<b>6'339</b>	<b>1'801</b>	<b>23'398</b>	<b>172</b>			<b>137'494</b>

<sup>1</sup> The counterparty groups correspond to those in the Capital Adequacy Ordinance (CAO). Non-counterparty-related assets and exposures with equity-type characteristics are not stated under credit exposure.

Credit exposures are shown after netting based on equity. Off-balance-sheet items were converted into their credit equivalents. Effective 31 December 2012, the financial collateral comprehensive method is used for credit risk mitigation. Under this method, the net value of financial collateral is deducted from the covered exposure after taking into account supervisory haircuts. The substitution approach continues to be used for guarantees, whereby covered exposures can be allocated to the counterparty group of the protection seller in order to reflect the lower risk of the collateral. In contrast with the previous table, this table shows the credit exposures of the counterparty groups after the provision of collateral (deduction or substitution).

<sup>2</sup> The fair value method was used to calculate the credit equivalents on derivatives.

<sup>3</sup> Includes exposures vis-à-vis qualified central counterparties (risk weighting category 2%).

On a selective basis, Zürcher Kantonalbank uses derivatives for the purpose of hedging credit exposures. Credit derivatives for hedging purposes are managed in the banking book in accordance with the Capital Adequacy Ordinance (CAO). There were no corresponding open positions as at 31 December 2016.

Fig. 10: Credit derivative transactions in the banking book group

<i>in CHF million</i>	<b>Protection seller</b> Contract volume	<b>Protection buyer</b> Contract volume
Credit default swaps		
Credit linked notes		
Total return swaps		
First-to-default swaps		
Other credit derivatives		
<b>Total as at 31.12.2016</b>		
<b>Total as at 31.12.2015</b>		

Fig. 11: Key characteristics of regulatory capital instruments

	<b>Endowment capital</b>	<b>Tier 1 bond</b>
Issuer	Zürcher Kantonalbank	Zürcher Kantonalbank
Applicable law to instrument	Swiss law	Swiss law
Identifier (ISIN)	n/a	CH0143808332
<b>Supervisory treatment</b>		
Treatment under Basel III transitional rules (CET1 / AT1 / T2)	Common equity Tier 1 (CET1)	Additional Tier 1 capital (AT1)
Treatment after Basel III transitional period (CET1 / AT1 / T2)	Common equity Tier 1 (CET1)	Additional Tier 1 capital (AT1)
Eligible at solo / group / solo and group levels	Solo and group level	Solo and group level
Equity securities / debt securities / hybrid instruments / other instruments	Other instruments	Hybrid instrument (subordinated bond with conditional claim waiver)
Amount eligible as regulatory capital (according to latest statement of changes in equity)	CHF 2'425 million	CHF 583 million
Nominal value of instrument	CHF 2'425 million	CHF 590 million
Accounting item	Corporate capital	Bonds
Original date of issue	15.02.1870	31.01.2012
Unlimited or with expiry date	Unlimited	Unlimited
Original date of maturity	n/a	n/a
May be terminated by issuer (with prior consent of supervisory authority)	No	Yes
May be terminated at any time / in specific circumstances / redemption amount	n/a	First possible termination date 30.06.2017. Redemption amount: entire outstanding issue, no partial termination
May be terminated at a later date, if applicable	n/a	Thereafter annually on interest date of 30 June
<b>Coupons / dividends</b>		
Fixed / variable / initially fixed then variable / initially variable then fixed	n/a	Fixed with reset every 5 years
Nominal coupon and any reference index	n/a	Fixed at 3.5% until 30.06.2017; thereafter revised every 5 years based on 5-year mid-swap plus 2.98% risk premium
Existence of a dividend stopper arrangement (the waiving of dividends on the instrument also results in the stopping of dividends on common shares)	n/a	Yes. No distribution to canton if coupon is not paid
Interest payment / dividend: fully discretionary / partly discretionary / mandatory	Profit distribution fully discretionary	Payment of interest fully discretionary
Existence of an interest step-up clause or other incentive to redeem	No	No
Non-cumulative or cumulative	Non-cumulative	Non-cumulative
Convertible or non-convertible	Non-convertible	Non-convertible, write-off
Write-down characteristics	n/a	Write-down until trigger ratio (7%) is met again
Trigger for write-down	n/a	Common equity Tier 1 (CET1) capital ratio falls below 7% or FINMA declares PONV (point-of-non-viability)
Full / partial	n/a	Full or partial. To return to the trigger ratio (7%) in 25% stages from the nominal amount
Permanent or temporary	n/a	Permanent
In the case of temporary depreciation: allocation mechanism	n/a	n/a
Hierarchy in event of liquidation (state the higher-ranked instrument in each case)	Tier 1 bond	Subordinate to all other subordinated liabilities (if any) except pari passu instruments.
Existence of characteristics that prevent full recognition under Basel III	No	No

	<b>CHF Tier 2 bond</b>	<b>EUR Tier 2 bond</b>
Issuer	Zürcher Kantonalbank	Zürcher Kantonalbank
Applicable law to instrument	Swiss law	Swiss law
Identifier (ISIN)	CH0267596697	XS1245290181
<b>Supervisory treatment</b>		
Treatment under Basel III transitional rules (CET1 / AT1 / T2)	Supplementary capital (Tier 2)	Supplementary capital (Tier 2)
Treatment after Basel III transitional period (CET1 / AT1 / T2)	Supplementary capital (Tier 2)	Supplementary capital (Tier 2)
Eligible at solo / group / solo and group levels	Solo and group level	Solo and group level
Equity securities / debt securities / hybrid instruments / other instruments	Hybrid instrument (subordinated bond with conditional claim waiver)	Hybrid instrument (subordinated bond with conditional claim waiver)
Amount eligible as regulatory capital (according to latest statement of changes in equity)	CHF 183 million	CHF 531 million
Nominal value of instrument	CHF 185 million	EUR 500 million
Accounting item	Bonds	Bonds
Original date of issue	02.03.2015	15.06.2015
Unlimited or with expiry date	02.09.2025	15.06.2027
Original date of maturity	n/a	n/a
May be terminated by issuer (with prior consent of supervisory authority)	Yes	Yes
May be terminated at any time / in specific circumstances / redemption amount	First possible termination date 02.09.2020. Redemption amount: entire outstanding issue, no partial termination	First possible termination date 15.06.2022. Redemption amount: entire outstanding issue, no partial termination
May be terminated at a later date, if applicable	Thereafter annually on interest date of 02 Sep	n/a
<b>Coupons / dividends</b>		
Fixed / variable / initially fixed then variable / initially variable then fixed	Fixed with reset every 5 years	Fixed with reset every 7 years
Nominal coupon and any reference index	Fixed at 1.0% until 02.09.2020; thereafter reset based on 5-year mid-swap (minimum 0.00%) plus 1.00% risk premium	Fixed at 2.625% until 15.06.2022; thereafter reset based on 5-year mid-swap plus 1.85% risk premium
Existence of a dividend stopper arrangement (the waiving of dividends on the instrument also results in the stopping of dividends on common shares)	No	No
Interest payment / dividend: fully discretionary / partly discretionary / mandatory	Interest payment mandatory, except if write-off has occurred	Interest payment mandatory, except if write-off has occurred
Existence of an interest step-up clause or other incentive to redeem	No	No
Non-cumulative or cumulative	n/a	n/a
Convertible or non-convertible	Non-convertible, write-off	Non-convertible, write-off
Write-down characteristics	Full write-down if trigger has occurred	Full write-down if trigger has occurred
Trigger for write-down	Common equity Tier 1 (CET1) capital ratio falls below 5% or FINMA declares PONV (point-of-non-viability)	Common equity Tier 1 (CET1) capital ratio falls below 5% or FINMA declares PONV (point-of-non-viability)
Full / partial	Full	Full
Permanent or temporary	Permanent	Permanent
In the case of temporary depreciation: allocation mechanism	n/a	n/a
Hierarchy in event of liquidation (state the higher-ranked instrument in each case)	Has priority over lower-subordinated liabilities such as liabilities from Tier 1 bonds. Pari passu with similarly ranked instruments such as Tier 2 bonds. Subordinated to all other liabilities.	Has priority over lower-subordinated liabilities such as liabilities from Tier 1 bonds. Pari passu with similarly ranked instruments such as Tier 2 bonds. Subordinated to all other liabilities.
Existence of characteristics that prevent full recognition under Basel III	No	No

Fig. 12: Risk-weighted positions determined on basis of external ratings group

		<i>in CHF million</i>	0%	20%	50%	100%	150%
<b>Credit exposure after provision of collateral</b>							
Central governments and central banks	With rating <sup>1</sup>	732			0	3	
	No rating					202	
Banks and securities dealers	With rating <sup>1</sup>		6'101	4'491	603	97	
	No rating		385	861			
Other institutions	With rating <sup>2</sup>		450	150			
	No rating				625		
Companies	With rating <sup>2</sup>		574	649	151	0	
	No rating				7'642		

<sup>1</sup> Standard & Poor's, Moody's, Fitch

<sup>2</sup> Standard & Poor's, Moody's

## 2.4 Interest rate risks in the banking book

The sensitivity data (key rate sensitivity) shown in the tables below indicate the value loss or increase when interest rates for each maturity band fall by one basis point (0.01 percentage points). The CHF interest rate sensitivity of the banking book stood at CHF 8.1 million per basis point as at 31 December 2016, in line with the previous year. The interest rate exposure mainly serves as a strategic hedge against persistently low or falling Swiss franc interest rates. The euro and US dollar interest rate exposures are almost fully hedged as of the end of 2016.

Fig. 13: Swiss franc, euro and US dollar interest rate sensitivity in the banking book

Basis point sensitivity <sup>1</sup> in CHF 1,000	up to 12 months	1 to 5 years	over 5 years	Total
Hedged item	-30	3'902	6'934	10'806
Hedge	-36	-1'788	-879	-2'703
<b>Total as at 31.12.2016</b>	<b>-66</b>	<b>2'114</b>	<b>6'055</b>	<b>8'103</b>
<b>Total as at 31.12.2015</b>	<b>200</b>	<b>3'349</b>	<b>4'509</b>	<b>8'058</b>

Basis point sensitivity <sup>1</sup> in EUR 1,000	up to 12 months	1 to 5 years	over 5 years	Total
Hedged item	-10	-237	-763	-1'010
Hedge	28	168	845	1'041
<b>Total as at 31.12.2016</b>	<b>18</b>	<b>-69</b>	<b>82</b>	<b>31</b>
<b>Total as at 31.12.2015</b>	<b>-27</b>	<b>-39</b>	<b>120</b>	<b>54</b>

Basis point sensitivity <sup>1</sup> in USD 1,000	up to 12 months	1 to 5 years	over 5 years	Total
Hedged item	-13	38	2	27
Hedge	-	-	-	-
<b>Total as at 31.12.2016</b>	<b>-13</b>	<b>38</b>	<b>2</b>	<b>27</b>
<b>Total as at 31.12.2015</b>	<b>-2</b>	<b>30</b>	<b>17</b>	<b>45</b>

<sup>1</sup> Basis point sensitivity is measured as a cash profit/loss when the interest rate in the maturity band concerned falls by one basis point. A basis point is 0.01 percentage points.

## 2.5 Leverage ratio

Fig. 14: Comparison between assets reported in the balance sheet and the total exposure for the leverage ratio, as well as detailed illustration of the leverage ratio

<i>in CHF million</i>	<b>Group</b> <b>31.12.2016</b>	<b>Parent Company <sup>1</sup></b> <b>31.12.2016</b>
<i>Overview of total exposure <sup>2</sup></i>		
1 Total assets as stated in the published accounts <sup>1</sup>	157'985	157'894
2 Adjustments relating to investments in banking, financial, insurance and commercial entities that are consolidated for accounting purposes but not included in the scope of regulatory consolidation (m.n. 6-7 FINMA Circular 15/3), and adjustments relating to assets deducted from core capital (m.n. 16-17 FINMA Circular 15/3)	-177	-450
3 Adjustments relating to fiduciary assets that are recognised in the balance sheet but not taken into account in the measurement of the leverage ratio (m.n. 15 FINMA Circular 15/3)		
4 Adjustments relating to derivatives (m.n. 21-51 FINMA Circular 15/3)	3'754	3'754
5 Adjustments relating to securities financing transactions (m.n. 52-73 FINMA Circular 15/3)	2'149	2'149
6 Adjustments relating to off-balance-sheet transactions (m.n. 74-76 FINMA Circular 15/3)	7'906	7'906
7 Other adjustments		
<b>8 Overall exposure subject to the leverage ratio</b>	<b>171'618</b>	<b>171'254</b>
<i>Detailed presentation of the leverage ratio <sup>3</sup></i>		
<b>Balance sheet exposures</b>		
1 Balance sheet items excluding derivatives and securities financing transactions (SFTs) but including collateral (m.n. 14-15 FINMA Circular 15/3)	141'162	141'072
2 Assets that must be deducted from eligible core capital (m.n. 7 and m.n. 16-17 FINMA Circular 15/3).	-177	-450
<b>3 Total balance sheet positions subject to the leverage ratio excluding derivatives and SFTs</b>	<b>140'985</b>	<b>140'622</b>
<b>Derivatives</b>		
4 Positive replacement values relating to all derivative transactions including those concluded with central counterparties (CCPs) after taking into account margin payments and netting agreements (m.n. 22-23 and m.n. 34-35 FINMA Circular 15/3)	2'043	2'043
5 Add-ons for all derivatives (m.n. 22 and m.n. 25 FINMA Circular 15/3)	3'594	3'594
6 Reintegration of collateral provided in connection with derivatives if its accounting treatment results in a reduction in assets (m.n. 27 FINMA Circular 15/3)	2'584	2'584
7 Deduction of receivables arising due to margin payments (m.n. 36 FINMA Circular 15/3)	-2'561	-2'561
8 Deduction relating to the exposure to qualified central counterparties (QCCPs) if there is no obligation to reimburse the customer in the event that a QCCP defaults (m.n. 39 FINMA Circular 15/3)		
9 Effective notional amount of credit derivatives issued, after deduction of negative replacement values (m.n. 43 FINMA Circular 15/3)	137	137
10 Netting with effective notional amount of offsetting credit derivatives (m.n. 44-50 FINMA Circular 15/3) and deduction of add-ons for credit derivatives issued (m.n. 51 FINMA Circular 15/3)	-109	-109
<b>11 Total exposure from derivatives</b>	<b>5'687</b>	<b>5'688</b>



<i>in CHF million</i>	<b>Group</b>	<b>Parent Company <sup>1</sup></b>
	<b>31.12.2016</b>	<b>31.12.2016</b>
<b>Securities financing transactions (SFTs)</b>		
12 Gross assets in connection with SFTs without netting (except in the case of novation with a qualified central counterparty (m.n. 57 FINMA Circular 15/3)) including those recognised as a sale (m.n. 69 FINMA Circular 15/3), less the securities received as part of the SFT, which are recognised as assets in the balance sheet (m.n. 58 FINMA Circular 15/3)	14'889	14'889
13 Netting of cash payables and receivables relating to SFT counterparties (m.n. 59-62 FINMA Circular 15/3)		
14 Exposure to SFT counterparties (m.n. 63-68 FINMA Circular 15/3)	2'149	2'149
15 Exposure to SFTs with the bank as agent (m.n. 70-73 FINMA Circular 15/3)		
<b>16 Total exposure from SFTs</b>	<b>17'038</b>	<b>17'038</b>
<b>Other off-balance-sheet exposures</b>		
17 Off-balance-sheet transactions as gross notional amount prior to use of credit conversion factors	31'315	31'310
18 Adjustments relating to conversion into credit equivalents (m.n. 75-76 FINMA Circular 15/3)	-23'409	-23'404
<b>19 Total off-balance-sheet exposures</b>	<b>7'906</b>	<b>7'906</b>
<b>Eligible capital and total exposure</b>		
20 Core capital (Tier 1) (m.n. 5 FINMA Circular 15/3)	10'849	10'647
21 Total exposure (sum of lines 3, 11, 16 and 19)	171'618	171'254
<b>Leverage ratio</b>		
22 Leverage ratio (m.n. 3-4 FINMA Circular 15/3)	6.32%	6.22%

<sup>1</sup> The parent company's capital is calculated on a solo consolidated basis from 31 December 2012. Under Art. 10 para. 3 CAO, FINMA can allow a bank to consolidate group companies operating in the financial sector at individual institution level (solo consolidation) on account of their particularly close relationship to the bank. FINMA has ruled that Zürcher Kantonalbank may consolidate the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd. on a solo basis under the individual institution provisions from 2012.

<sup>2</sup> The numbering of the lines corresponds to model table 46 in Appendix 2 of FINMA Circular 16/1 Disclosure - Banks.

<sup>3</sup> The numbering of the lines corresponds to model table 47 in Appendix 2 of FINMA Circular 16/1 Disclosure - Banks.

## 2.6 Liquidity coverage ratio (LCR)

Fig. 15: Information on the short-term liquidity ratio (LCR) (group)

<i>in CHF million</i>	Quarterly averages Q3 2016 <sup>1</sup>		Quarterly averages Q4 2016 <sup>1</sup>	
	Unweighted values	Weighted values	Unweighted values	Weighted values
<b>High quality liquid assets (HQLA)</b>				
<b>Total high quality liquid assets (HQLA)</b>		<b>40'482</b>		<b>40'976</b>
<i>of which Level 1</i>		37'550		37'773
<i>of which Level 2</i>		2'932		3'203
<b>Outflow of funds</b>				
<b>Deposits from retail customers and SMEs</b>				
<i>of which stable deposits</i>	51'291	5'323	52'009	5'414
<i>of which less stable deposits</i>	6'031	302	5'972	299
	45'260	5'021	46'037	5'116
<b>Unsecured funds provided by commercial or major customers</b>	39'799	23'796	39'691	22'836
<i>of which operating deposits (all counterparties)</i>	3'859	965	3'892	973
<i>of which non-operating deposits (all counterparties)</i>	35'692	22'583	35'600	21'663
<i>of which unsecured funds</i>	248	248	200	200
<b>Secured funding provided by commercial or major customers and security swaps</b>		7'287		7'075
<b>Other outflow of funds</b>	42'496	32'040	43'067	32'729
<i>of which outflows of funds relating to trading in derivatives and other transactions</i>	35'036	30'238	35'641	30'977
<i>of which outflows of funds from mortgage bond loans</i>	114	114	73	73
<i>davon Mittelabflüsse aus fest zugesagten Kredit- und Liquiditätsfazilitäten</i>	7'345	1'688	7'353	1'680
<b>Other contractual obligations regarding funding</b>	965	950	762	733
<b>Other contingent liabilities regarding funding</b>	24'595	371	24'995	374
<b>Total outflows of funds</b>		<b>69'767</b>		<b>69'162</b>
<b>Inflows of funds</b>				
Secured financing operations (e.g. reverse repo transactions) and security swaps	8'264	5'990	8'947	6'018
Inflows from receivables at full value	2'948	2'933	2'458	2'430
Other inflows of funds	28'513	28'513	29'563	29'563
<b>Total inflows of funds</b>	<b>39'725</b>	<b>37'436</b>	<b>40'969</b>	<b>38'011</b>
<b>Total high quality liquid assets (HQLA)</b>		<b>40'482</b>		<b>40'976</b>
<b>Total net inflows of funds</b>		<b>32'331</b>		<b>31'151</b>
<b>Liquidity coverage ratio LCR (in %)</b>		<b>125%</b>		<b>132%</b>

<sup>1</sup> The average is calculated based on the values shown in the monthly liquidity statement.

## 2.7 Market risks

Zürcher Kantonalbank's market risks are measured using an internal model approach based on value-at-risk (VaR) for a 10-day holding period and at a confidence level of 99 percent. As at 31 December 2016 the value-at-risk (incl. risk premium for incompletely modelled products) amounted to CHF 9 million and was thus below the level at the end of the previous year (previous year: CHF 12 million). Interest rate risks continue to dominate. On average, the value-at-risk for 2016 fell by CHF 6 million, to CHF 11 million, compared with 2015.

Fig. 16a: Market risks in the trading book (group)

Risks including volatility risks in CHF million	Commodities <sup>1</sup>	Currencies <sup>2</sup>	Interest rates	Equities	Diversification	Modelled total risk	Total risk <sup>3</sup>
Risks based on model approach (value-at-risk with 10-day holding period)							
<b>As at 30 December 2016</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>-5</b>	<b>7</b>	<b>9</b>
Average current year 2016	1	1	9	3	-5	8	11
Maximum	1	4	16	8	-9	15	17
Minimum	0	0	6	1	-3	5	7
<b>As at 31 December 2015</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>3</b>	<b>-4</b>	<b>9</b>	<b>12</b>

1 Excluding gold

2 Including gold

3 Sum of modelled total risk and risk premium for trading products not fully modelled

To determine its capital adequacy requirements, Zürcher Kantonalbank also calculates a stress-based VaR on a weekly basis. The total risk is also calculated using the internal model approach. The value changes in risk factors are based on data that were observed in a period with significant market stress for Zürcher Kantonalbank:

Fig. 16b: Stress-based market risks in the trading book and banking book (group)<sup>1</sup>

Stress-based VaR in CHF million	Modelled total risk	Total risk <sup>2</sup>
Stress-based risks based on model approach (value-at-risk with 10-day holding period) <sup>3</sup>		
<b>As at 30 December 2016</b>	<b>36</b>	<b>38</b>
Average current year 2016	42	44
Maximum	55	59
Minimum	33	35
<b>As at 31 December 2015</b>	<b>39</b>	<b>42</b>

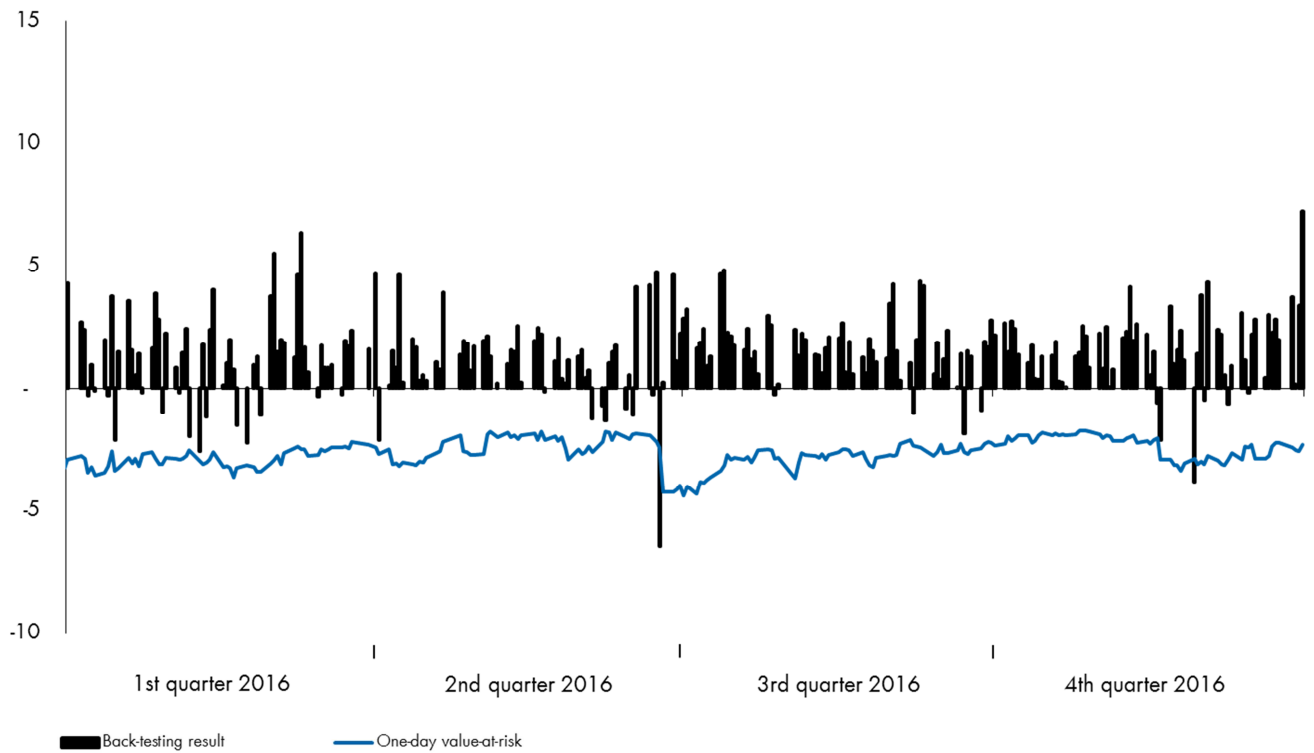
1 Including exchange rate, precious metals and commodity risks in the banking book

2 Sum of modelled total risk and risk premium for trading products not fully modelled.

3 VaR model, calibrated for observed changes in value due to market stress

The quality of the VaR model used by Zürcher Kantonalbank is tested by back-testing. A VaR is calculated assuming a one-day holding period (confidence level 99 percent) and compared with the daily trading income achieved on the next trading day. The following picture emerges for the last 250 trading days:

Fig. 17: Comparison of back-testing results<sup>1</sup> and value-at-risk (group) (in CHF million)



<sup>1)</sup> The back-testing result corresponds to the adjusted trading income used for the methodological review of the quality of the risk model.

## 2.8 Systemic importance disclosures

Zürcher Kantonalbank has been considered a systemically relevant bank since November 2013.

The risk-weighted capital requirements for systemically important banks consist of a basic requirement (4.5 percent), the capital buffer (8.5 percent) plus the countercyclical capital buffer (0.7 percent as at 31 December 2016) and a progressive component (1.0 percent). The latter is calculated from the sum of the supplement for the domestic market share and the supplement for the size of the financial group, although deductions may be considered for measures designed to improve the resolvability of the financial group. The level of the progressive component is stipulated each year by the Swiss Financial Market Supervisory Authority (FINMA). The unweighted capital adequacy requirement (leverage ratio) is calculated as a percentage of the total exposure. Derived from the FINMA ruling of August 2014, this is 3.4 percent of the total exposure.

Fig. 18: Risk-based capital adequacy requirement (capital ratios)

in CHF million	Group 31.12.2016			
	Transitional rules		Rules as of 2020	
Assessment basis	CHF		CHF	
Risk-weighted assets (RWA)	65'987		65'987	
<b>Risk-based capital adequacy requirements (going concern) (capital ratios)</b>	CHF	In % RWA	CHF	In % RWA
<b>Total<sup>1</sup></b>	<b>9'691</b>	<b>14.7%</b>	<b>9'889</b>	<b>15.0%</b>
Of which CET1: Minimum	4'075	6.2%	2'969	4.5%
Of which CET1: Capital buffer	1'287	2.0%	2'679	4.1%
Of which CET1: Countercyclical capital buffer	453	0.7%	453	0.7%
Of which CET1: Additional capital pillar 2	1'237	1.9%	950	1.4%
Of which Additional Tier 1: Minimum	1'204	1.8%	2'310	3.5%
Of which Additional Tier 1: Capital buffer	528	0.8%	528	0.8%
Of which Additional Tier 1: Additional capital pillar 2	907	1.4%		
<b>Eligible capital (going concern)<sup>2,3</sup></b>	CHF	In % RWA	CHF	In % RWA
<b>Core capital</b>	<b>11'564</b>	<b>17.5%</b>	<b>10'849</b>	<b>16.4%</b>
Of which CET1	8'924	13.5%	8'012	12.1%
Of which CET1 to cover Additional Tier 1 requirements	1'342	2.0%	2'254	3.4%
Of which Additional Tier 1 High-trigger CoCos	583	0.9%	583	0.9%
Of which Additional Tier 1 Low-trigger CoCos				
Of which Tier 2 High-trigger CoCos			-	-
Of which Tier 2 Low-trigger CoCos	714	1.1%	-	-
<b>Risk-based requirements for additional loss-absorbing funds (gone concern) (capital ratios)<sup>4</sup></b>	CHF	In % RWA	CHF	In % RWA
<b>Total (net)</b>				
<b>Eligible additional loss-absorbing funds (gone concern)</b>	CHF	In % RWA	CHF	In % RWA
<b>Total</b>				
Of which bail-in bonds				
Of which CET1 used to meet gone concern requirements				
Of which Additional Tier 1 used to meet gone concern requirements				

<sup>1</sup> Capital requirements are calculated as a percentage of risk-weighted assets. Derived from the FINMA ruling of August 2014, the CET1 target ratio for Zürcher Kantonalbank is 10.0%, the T1 target ratio is 13.0%, the total capital target ratio is 14.0%, plus a countercyclical buffer of 0.7% in each case.

<sup>2</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140–142 CAO, which allow a gradual introduction of the new rules.

<sup>3</sup> Pursuant to the transitional provisions on the amendment of the CAO of 11 May 2016 (Art. 148b CAO) with regard to capital quality for systemically important banks, low-trigger Tier 2 capital can be charged to core capital until the first capital call, at the latest by 31 December 2019.

<sup>4</sup> There are currently no gone concern capital requirements for D-SIBs (domestic systemically important banks).

Parent Company<sup>5,6</sup>

31.12.2016

in CHF million

**Assessment basis**

	Transitional rules		Rules as of 2020	
	CHF		CHF	
Risk-weighted assets (RWA)	65'731		65'731	

**Risk-based capital adequacy requirements (going concern) (capital ratios)**

	CHF	In % RWA	CHF	In % RWA
<b>Total<sup>1</sup></b>	<b>9'655</b>	<b>14.7%</b>	<b>9'852</b>	<b>15.0%</b>
Of which CET1: Minimum	4'059	6.2%	2'958	4.5%
Of which CET1: Capital buffer	1'282	2.0%	2'669	4.1%
Of which CET1: Countercyclical capital buffer	453	0.7%	453	0.7%
Of which CET1: Additional capital pillar 2	1'232	1.9%	947	1.4%
Of which Additional Tier 1: Minimum	1'200	1.8%	2'301	3.5%
Of which Additional Tier 1: Capital buffer	526	0.8%	526	0.8%
Of which Additional Tier 1: Additional capital pillar 2	904	1.4%	0	0.0%

**Eligible capital (going concern)<sup>2,3</sup>**

	CHF	In % RWA	CHF	In % RWA
<b>Core capital</b>	<b>11'362</b>	<b>17.3%</b>	<b>10'647</b>	<b>16.2%</b>
Of which CET1	8'732	13.3%	7'821	11.9%
Of which CET1 to cover Additional Tier 1 requirements	1'332	2.0%	2'243	3.4%
Of which Additional Tier 1 High-trigger CoCos	583	0.9%	583	0.9%
Of which Additional Tier 1 Low-trigger CoCos				
Of which Tier 2 High-trigger CoCos			-	-
Of which Tier 2 Low-trigger CoCos	714	1.1%	-	-

**Risk-based requirements for additional loss-absorbing funds (gone concern) (capital ratios)<sup>4</sup>**

	CHF	In % RWA	CHF	In % RWA
<b>Total (net)</b>				

**Eligible additional loss-absorbing funds (gone concern)**

	CHF	In % RWA	CHF	In % RWA
<b>Total</b>				
Of which bail-in bonds				
Of which CET1 used to meet gone concern requirements				
Of which Additional Tier 1 used to meet gone concern requirements				

<sup>1</sup> Capital requirements are calculated as a percentage of risk-weighted assets. Derived from the FINMA ruling of August 2014, the CET1 target ratio for Zürcher Kantonalbank is 10.0%, the T1 target ratio is 13.0%, the total capital target ratio is 14.0%, plus a countercyclical buffer of 0.7% in each case.

<sup>2</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140–142 CAO, which allow a gradual introduction of the new rules.

<sup>3</sup> Pursuant to the transitional provisions on the amendment of the CAO of 11 May 2016 (Art. 148b CAO) with regard to capital quality for systemically important banks, low-trigger Tier 2 capital can be charged to core capital until the first capital call, at the latest by 31 December 2019.

<sup>4</sup> There are currently no gone concern capital requirements for D-SIBs (domestic systemically important banks).

<sup>5</sup> The parent company's capital is calculated on a solo consolidated basis from 31 December 2012. Under Art. 10 para. 3 CAO, FINMA can allow a bank to consolidate group companies operating in the financial sector at individual institution level (solo consolidation) on account of their particularly close relationship to the bank. FINMA has ruled that Zürcher Kantonalbank may consolidate the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd. on a solo basis under the individual institution provisions from 2012.

<sup>6</sup> Zürcher Kantonalbank does not claim any relief on the basis of Art. 125 CAO.

Fig. 19: Unweighted capital adequacy requirements (leverage ratio).

<i>in CHF million</i>	<b>Group 31.12.2016</b>			
	<b>Transitional rules</b>		<b>Rules as of 2020</b>	
<b>Assessment basis</b>	CHF		CHF	
Total exposure (leverage ratio denominator, LRD)	171'618		171'618	
<b>Unweighted capital adequacy requirements (going concern) (leverage ratio)</b>	CHF	In % LRD	CHF	In % LRD
<b>Total<sup>1</sup></b>	<b>5'766</b>	<b>3.4%</b>	<b>7'723</b>	<b>4.5%</b>
Of which CET1: Minimum	3'947	2.3%	2'574	1.5%
Of which CET1: Capital buffer	0	0.0%	2'574	1.5%
Of which CET1: Additional capital pillar 2	172	0.1%		
Of which Additional Tier 1: Minimum	1'201	0.7%	2'574	1.5%
Of which Additional Tier 1: Additional capital pillar 2	446	0.3%		
<b>Eligible capital (going concern)<sup>2,3</sup></b>	CHF	In % LRD	CHF	In % LRD
<b>Core capital</b>	<b>11'467</b>	<b>6.7%</b>	<b>10'849</b>	<b>6.3%</b>
Of which CET1	8'924	5.2%	8'012	4.7%
Of which CET1 to cover Additional Tier 1 requirements	1'342	0.8%	2'254	1.3%
Of which Additional Tier 1 High-trigger CoCos <sup>4</sup>	583	0.3%	583	0.3%
Of which Additional Tier 1 Low-trigger CoCos				
Of which Tier 2 High-trigger CoCos			-	-
Of which Tier 2 Low-trigger CoCos <sup>4</sup>	618	0.4%	-	-
<b>Unweighted requirements for additional loss-absorbing funds (gone concern) (leverage ratio)<sup>5</sup></b>	CHF	In % LRD	CHF	In % LRD
<b>Total (net)</b>				
<b>Eligible additional loss-absorbing funds (gone concern)</b>	CHF	In % LRD	CHF	In % LRD
<b>Total</b>				
Of which bail-in bonds				
Of which CET1 used to meet gone concern requirements				
Of which Additional Tier 1 used to meet gone concern requirements				

<sup>1</sup> Capital requirements are calculated as a percentage of risk-weighted assets. Derived from the FINMA ruling of August 2014, the unweighted capital adequacy requirement is 3.4%.

<sup>2</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 – 142 CAO, which allow a gradual introduction of the new rules.

<sup>3</sup> Pursuant to the transitional provisions on the amendment of the CAO of 11 May 2016 (Art. 148b CAO) with regard to capital quality for systemically important banks, low-trigger Tier 2 capital can be charged to core capital until the first capital call, at the latest by 31 December 2019.

<sup>4</sup> The eligible capital in the unweighted capital ratio which can be covered by AT1, and in the transitional period by AT2, is limited to 0.7% in 2016 (Art. 148c CAO).

<sup>5</sup> There are currently no gone concern capital requirements for D-SIBs (domestic systemically important banks).

in CHF million	Parent Company <sup>6,7</sup>			
	31.12.2016		Rules as of 2020	
Assessment basis	Transitional rules		Rules as of 2020	
	CHF		CHF	
Total exposure (leverage ratio denominator, LRD)	171'254		171'254	
<b>Unweighted capital adequacy requirements (going concern) (leverage ratio)</b>	CHF	In % LRD	CHF	In % LRD
Total <sup>1</sup>	<b>5'754</b>	<b>3.4%</b>	<b>7'706</b>	<b>4.5%</b>
Of which CET1: Minimum	3'939	2.3%	2'569	1.5%
Of which CET1: Capital buffer	0	0.0%	2'569	1.5%
Of which CET1: Additional capital pillar 2	171	0.1%		
Of which Additional Tier 1: Minimum	1'199	0.7%	2'569	1.5%
Of which Additional Tier 1: Additional capital pillar 2	445	0.3%		
<b>Eligible capital (going concern)<sup>2,3</sup></b>	CHF	In % LRD	CHF	In % LRD
<b>Core capital</b>	<b>11'263</b>	<b>6.6%</b>	<b>10'647</b>	<b>6.2%</b>
Of which CET1	8'732	5.1%	7'821	4.6%
Of which CET1 to cover Additional Tier 1 requirements	1'332	0.8%	2'243	1.3%
Of which Additional Tier 1 High-trigger CoCos <sup>4</sup>	583	0.3%	583	0.3%
Of which Additional Tier 1 Low-trigger CoCos				
Of which Tier 2 High-trigger CoCos			-	-
Of which Tier 2 Low-trigger CoCos <sup>4</sup>	615	0.4%	-	-
<b>Unweighted requirements for additional loss-absorbing funds (gone concern) (leverage ratio)<sup>5</sup></b>	CHF	In % LRD	CHF	In % LRD
<b>Total (net)</b>				
<b>Eligible additional loss-absorbing funds (gone concern)</b>	CHF	In % LRD	CHF	In % LRD
<b>Total</b>				
Of which bail-in bonds				
Of which CET1 used to meet gone concern requirements				
Of which Additional Tier 1 used to meet gone concern requirements				

<sup>1</sup> Capital requirements are calculated as a percentage of risk-weighted assets. Derived from the FINMA ruling of August 2014, the unweighted capital adequacy requirement is 3.4%.

<sup>2</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 –142 CAO, which allow a gradual introduction of the new rules.

<sup>3</sup> Pursuant to the transitional provisions on the amendment of the CAO of 11 May 2016 (Art. 148b CAO) with regard to capital quality for systemically important banks, low-trigger Tier 2 capital can be charged to core capital until the first capital call, at the latest by 31 December 2019.

<sup>4</sup> The eligible capital in the unweighted capital ratio which can be covered by AT1, and in the transitional period by AT2, is limited to 0.7% in 2016 (Art. 148c CAO).

<sup>5</sup> There are currently no gone concern capital requirements for D-SIBs (domestic systemically important banks).

<sup>6</sup> The parent company's capital is calculated on a solo consolidated basis from 31 December 2012. Under Art. 10 para. 3 CAO, FINMA can allow a bank to consolidate group companies operating in the financial sector at individual institution level (solo consolidation) on account of their particularly close relationship to the bank. FINMA has ruled that Zürcher Kantonalbank may consolidate the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd. on a solo basis under the individual institution provisions from 2012.

<sup>7</sup> Zürcher Kantonalbank does not claim any relief on the basis of Art. 125 CAO.



## 2.9 Additional requirements for major banks

Fig. 20: Minimum disclosures

<i>in CHF million (unless stated otherwise)</i>		<b>Group Parent company<sup>4</sup></b>	
		<b>31.12.2016</b>	<b>31.12.2016</b>
1	Minimum capital based on risk-based requirements	5'279	5'259
2	Eligible capital	11'564	11'362
3	Of which common equity Tier 1 (CET1)	10'266	10'064
4	Of which core capital (T1)	10'849	10'647
5	Risk-weighted assets (RWA)	65'987	65'731
6	CET1 ratio (common equity Tier 1 in % of RWA) <sup>1</sup>	15.6	15.3
7	Core capital ratio (core capital in % of RWA) <sup>1</sup>	16.4	16.2
8	Total capital ratio (in % of RWA) <sup>1</sup>	17.5	17.3
9	Countercyclical capital buffer (in % of RWA)	0.7	0.7
10	CET1 target ratio (in %) pursuant to Annex 8 to the CAO plus countercyclical capital buffer <sup>2</sup>	10.7	10.7
11	T1 target ratio (in %) pursuant to Annex 8 to the CAO plus countercyclical capital buffer <sup>2</sup>	13.7	13.7
12	Total capital target ratio (in %) pursuant to Annex 8 to the CAO plus countercyclical capital buffer <sup>2</sup>	14.7	14.7
13	Basel III leverage ratio (core capital in % of total exposure)	6.3	6.2
14	Total exposure	171'618	171'254
15	Short-term liquidity ratio, LCR (in %) in Q4 <sup>3</sup>	132	131
16	LCR numerator: Total high quality liquid assets	40'976	40'943
17	LCR denominator: Total net inflows of funds	31'151	31'230
18	Short-term liquidity ratio, LCR (in %) in Q3 <sup>3</sup>	125	125
19	LCR numerator: Total high quality liquid assets	40'482	40'459
20	LCR denominator: Total net inflows of funds	32'331	32'396
21	Short-term liquidity ratio, LCR (in %) in Q2 <sup>3</sup>	116	115
22	LCR numerator: Total high quality liquid assets	34'302	34'239
23	LCR denominator: Total net inflows of funds	29'673	29'808
24	Short-term liquidity ratio, LCR (in %) in Q1 <sup>3</sup>	119	118
25	LCR numerator: Total high quality liquid assets	34'821	34'752
26	LCR denominator: Total net inflows of funds	29'290	29'370

<sup>1</sup> Figures for capital are net values in accordance with the definitive Basel III provisions. Zürcher Kantonalbank chose not to make use of the transitional provisions under Art. 140 –142 CAO, which allow a gradual introduction of the new rules. The figures are calculated in accordance with the provisions of the CAO for non-systemically important banks.

<sup>2</sup> Derived from the FINMA ruling of August 2014, the CET1 target ratio for Zürcher Kantonalbank is 10.0%, the T1 target ratio is 13.0%, the total capital target ratio is 14.0%, plus a countercyclical buffer of 0.7% in each case.

<sup>3</sup> Based on monthly averages.

<sup>4</sup> The parent company's capital is calculated on a solo consolidated basis from 31 December 2012. Under Art. 10 para. 3 CAO, FINMA can allow a bank to consolidate group companies operating in the financial sector at individual institution level (solo consolidation) on account of their particularly close relationship to the bank. FINMA has ruled that Zürcher Kantonalbank may consolidate the subsidiary Zürcher Kantonalbank Finance (Guernsey) Ltd. on a solo basis under the individual institution provisions from 2012.