

## CREDIT OPINION

8 November 2021

Update

✓ Rate this Research

### RATINGS

#### Zuercher Kantonalbank

Domicile	Zurich, Switzerland
Long Term CRR	Aaa
Type	BACKED LT Counterparty Risk Rating
Outlook	Not Assigned
Long Term Debt	Aaa
Type	BACKED LT Issuer Rating
Outlook	Stable
Long Term Deposit	Aaa
Type	BACKED LT Bank Deposits
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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## Zuercher Kantonalbank

### Update to credit analysis

#### Summary

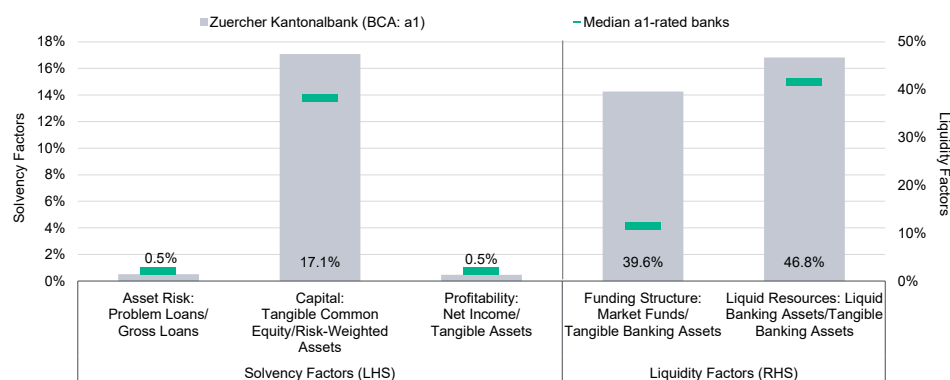
We assign Aaa(stable)/P-1 backed deposit and issuer ratings to [Zuercher Kantonalbank](#) (ZKB). We also assign a Baa1(hyb) preferred stock non-cumulative rating (assigned to the bank's high-trigger AT1 instruments), an a1 Baseline Credit Assessment (BCA), and a aa1 Adjusted BCA to ZKB.

ZKB's Aaa backed deposit and issuer ratings reflect its a1 BCA, three notches of rating uplift from affiliate support derived from the maintenance guarantee provided by the bank's sole owner, the Canton of Zurich, and the application of our Advanced Loss Given Failure (LGF) analysis to its liabilities, which indicates an extremely low loss-given-failure and results in one notch (rather than three notches) of rating uplift because of the Aaa rating ceiling. We consider ZKB as a domestic systemically important bank and assume that sovereign government support would be forthcoming in case of need, which however does not result in rating uplift from the bank's Aaa rating level.

ZKB's a1 BCA reflects the bank's favourable liquidity position, comprising a high proportion of cash, its strong capitalization and only moderate asset risk, despite being concentrated in the dynamic Zurich real estate market. The BCA further takes account of the bank's meaningful exposure to confidence-sensitive market funding mitigated by low funding costs and continued market access even in a more stressed environment because of the Canton's deficiency guarantee.

Exhibit 1

#### Rating Scorecard Zuercher Kantonalbank - Key financial ratios



Source: Moody's Financial Metrics

## Credit strengths

- » The Canton of Zurich provides a maintenance guarantee and a deficiency guarantee (fully guaranteeing all the bank's senior liabilities)
- » Strong capitalisation
- » Resilient profitability metrics, despite the low interest rate environment
- » Very solid liquidity, with strong market access because of the deficiency guarantee, which balances its market funding dependence

## Credit challenges

- » Continuous need to meet increasing gone concern capital requirements as a domestic systemically important financial institution
- » Growth in the bank's residential mortgage loan portfolio

## Outlook

- » The stable outlook reflects our expectation that the key credit metrics of ZKB, including its liability structure, will remain broadly unchanged. We also do not expect any change in the guarantee framework the canton provides to ZKB.

## Factors that could lead to an upgrade

- » ZKB's Aaa backed ratings are already positioned at the highest possible level and cannot be upgraded.
- » While upward pressure on the bank's standalone creditworthiness is highly unlikely, given the expected strain from the coronavirus crisis and the a1 BCA being positioned at the high-end of its peer group, a BCA upgrade could result from a combination of materially reduced concentrations risks, significantly higher profitability and an outsized shift in funding towards granular deposits.

## Factors that could lead to a downgrade

- » Downward pressure could be exerted on ZKB's backed issuer and deposit ratings if the Canton of Zurich's credit profile were to deteriorate or if the guarantee framework the canton provides to ZKB was altered. In addition, a lower result from our Advanced LGF analysis could result in downward pressure on the bank's issuer ratings.
- » The bank's BCA could be downgraded if its asset risk, predominantly from its real estate lending book, were to increase, resulting in sustainably higher problem loans, combined with lower buffer from its capital ratios and depressed profitability. Furthermore, a deteriorating liquidity profile could exert downward rating pressure.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Zuercher Kantonalbank (Consolidated Financials) [1]

	06-21 <sup>2</sup>	12-20 <sup>2</sup>	12-19 <sup>2</sup>	12-18 <sup>2</sup>	12-17 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (CHF Billion)	190.9	188.4	167.1	169.4	163.9	4.5 <sup>4</sup>
Total Assets (USD Billion)	206.5	213.1	172.5	171.8	168.2	6.0 <sup>4</sup>
Tangible Common Equity (CHF Billion)	12.2	12.6	13.0	12.5	11.8	0.9 <sup>4</sup>
Tangible Common Equity (USD Billion)	13.1	14.2	13.4	12.6	12.1	2.4 <sup>4</sup>
Problem Loans / Gross Loans (%)	--	0.5	0.5	0.6	0.7	0.6 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	17.1	18.3	20.0	19.9	18.5	18.7 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	--	3.9	3.3	4.0	5.1	4.1 <sup>5</sup>
Net Interest Margin (%)	0.7	0.7	0.7	0.8	0.8	0.7 <sup>5</sup>
PPI / Average RWA (%)	1.5	1.3	1.3	1.1	1.2	1.3 <sup>6</sup>
Net Income / Tangible Assets (%)	0.5	0.4	0.5	0.4	0.5	0.5 <sup>5</sup>
Cost / Income Ratio (%)	60.8	65.2	65.0	70.1	66.6	65.5 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	39.8	39.6	37.1	38.1	38.6	38.6 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	45.4	46.7	42.2	45.4	44.7	44.9 <sup>5</sup>
Gross Loans / Due to Customers (%)	107.7	104.7	109.5	104.9	106.8	106.7 <sup>5</sup>

[–] Further to the publication of our revised methodology in July 2021, only ratios from annual 2020 onwards included in this report reflect the change in analytical treatment of the "high-trigger" Additional Tier 1 instruments. [1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; LOCAL GAAP. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

## Profile

ZKB is Switzerland's largest cantonal bank, measured by its total assets of CHF191 billion as of 30 June 2021. The bank was established in 1870 by the Canton of Zurich, which is still its sole owner and extends to ZKB a maintenance guarantee, according to article 109 of the cantonal constitution. The maintenance guarantee requires the canton to inject capital into ZKB, in case of need, until the canton defaults itself. In addition, the Canton of Zurich provides a deficiency guarantee on the bank's unsubordinated obligations, as stipulated in the Cantonal Banking Act.

ZKB operates on a universal banking model, providing financial services to retail, corporate and institutional clients in the Canton of Zurich, including financing, investment and asset management, trading and capital markets services, payment transactions and debit and credit cards. The bank has a very strong position in the Canton of Zurich, yielding it a 6.7% share of Swiss domestic client deposits, a 7.6% share of Swiss domestic loans and a 8.1% share of total Swiss domestic banking assets as of 30 June 2021. As of the same date, ZKB operated through a network of 59 banking outlets, including branches of Zuercher Kantonalbank Österreich AG in Salzburg and Vienna. The bank also distributes its products and services through representative offices in China, India, Singapore and Brazil. Employing more than 5,100 staff, ZKB was classified a domestic systemically important institution by the Swiss National Bank (SNB) in November 2013.

For more information, please see ZKB's [Issuer Profile](#) and our [Swiss Banking System Profile](#).

## Weighted Macro Profile of Strong (+)

ZKB is focused on the Swiss market and its Weighted Macro Profile is therefore Strong (+), in line with the [Macro Profile](#) of Switzerland. The bank also has limited operations in the EU and other countries.

## Recent Developments

The coronavirus pandemic has caused an unprecedented shock to the global economy. The full extent of the effects on the economy will be unclear for some time and the level of uncertainty and strength of the economic recovery will vary across countries. The recovery path is beset by uncertainty and will remain highly dependent on the development and distribution of a vaccine, effective pandemic management and government policy support.

The Swiss economy has weathered the coronavirus crisis better than most other advanced economies. Real GDP contracted by just 2.5% in 2020. For 2021 and 2022, we forecast GDP growth of 3.0% and 2.9%, respectively. This sets the economy on track to surpass

its pre-pandemic level in 2022. The softer downturn and quick rebound reflect the country's competitive and well diversified economy, high household wealth and a strong social security safety net.

[Banks in Switzerland](#) entered the coronavirus crisis with very low problem loans, strong capital ratios, and adequate profitability. All three metrics proved resilient in 2020 and in 2021 so far and will likely remain unaffected by ongoing pandemic-related disruptions. Lockdown measures were also less stringent than in other countries and sizeable government stimuli of CHF74 billion during the first wave of the pandemic and more than CHF23 billion in the second and third wave provided further support.

## Detailed credit considerations

### ZKB's asset quality is strong, although growth in its residential mortgage loan portfolio poses risks

We assign an a2 Asset Risk score to ZKB, positioned three notches below its aa2 initial score. The assigned score captures the bank's strong asset-risk profile as reflected in its low level of nonperforming loans, as well as some operational risk related to its customer-driven trading activities and litigation risks stemming from its significant wealth and asset management operations.

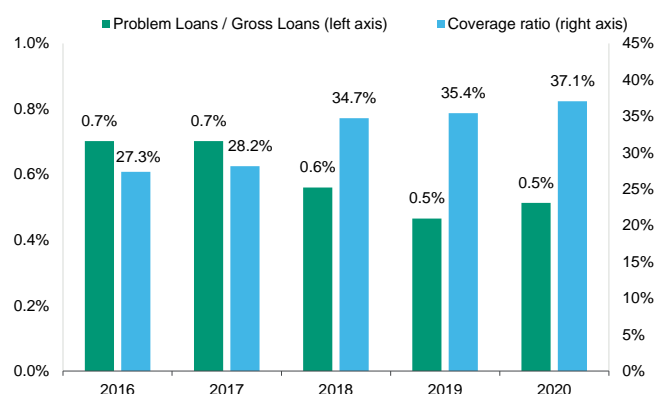
As of 30 June 2021, ZKB's residential and commercial mortgage book stood at CHF89.7 billion (47% of the bank's total assets), incorporating some susceptibility to a significant slowdown in the Zurich and Swiss housing markets or a prolonged period of weaker economic growth in Switzerland. The risks related to a potential slowdown are mitigated by the bank's solid capital buffers and a very low problem loan ratio of 0.5% as of year-end 2020 (2019: 0.5%), comparing favourably with those of its banking peers. Furthermore, the bank's loan book is highly granular and has limited exposure to the high-end luxury segments within the retail residential mortgage market (for further insights please refer to our publication [Swiss cantonal banks can absorb house price shock](#)).

ZKB has positioned itself as one of the larger providers of wealth and asset management offerings, both nationally and internationally. The bank had total client assets under management of CHF392 billion as of 30 June 2021, up 8.3% from CHF362 billion as of year-end 2020, reflecting CHF12 billion of net new money and positive market performance in the first half of 2021 (H1 2021). ZKB's private banking operations will continue to be accompanied by certain execution and reputational risks, despite the [US agreement](#), which resolved issues related to its US customers' alleged tax evasion. ZKB agreed to pay \$98.5 million, which equaled 12.4% of its peak US assets under management in August 2018, and entered into a three-year deferred prosecution agreement, which was closed on 3 September 2021 by the US government following full compliance with the agreement by ZKB.

Furthermore, the bank's largely client-oriented trading and foreign exchange activities contributed 16% to the bank's operating revenue in H1 2021, although trading assets of CHF11.6 billion remain limited compared with the bank's total assets of CHF191 billion as of 30 June 2021. The potential earnings volatility stemming from those positions are reflected in our Asset Risk assessment.

Exhibit 3

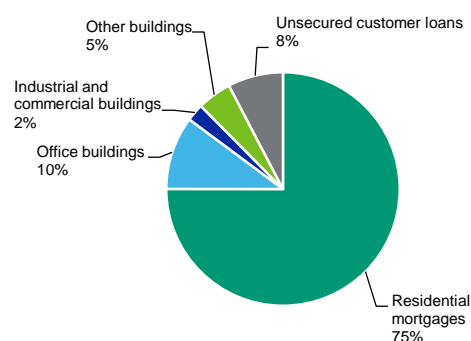
**ZKB's problem loan ratio remained very low, while its coverage ratio increased**



Source: Company reports, Moody's Investors Service

Exhibit 4

**ZKB's loan book largely consists of residential mortgages**  
Total loan book: CHF97.1bn as of year-end 2020



Source: Company reports, Moody's Investors Service

### ZKB's high capitalisation provides a strong buffer against adverse developments

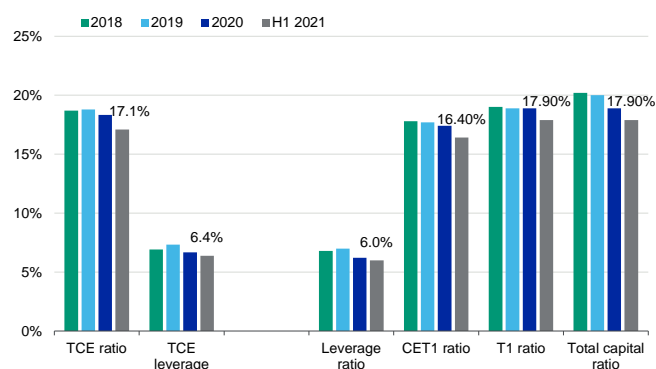
Our aa2 assigned Capital score, in line with the initial score, reflects ZKB's strong capitalisation levels as well as our expectation of broadly stable capital ratios in the future, as increases in risk-weighted assets are expected to be offset by retained earnings.

As the bank's sole owner, the Canton of Zurich provides a dotation capital frame, which was increased by CHF425 million to CHF3.425 billion in November 2020 to continue to meet regulatory gone-concern requirements. Of this capital frame, CHF2.425 billion has been drawn by ZKB and the remaining dotation capital of CHF1.0 billion is dedicated in full to the emergency planning of the bank, making the dotation capital reserve eligible as gone-concern capital. As a consequence, the related amount can only be recalled by order of the Swiss Financial Market Supervisory Authority (FINMA) or by a person in charge of the restructuring designated by FINMA. Furthermore, we expect the canton to provide further capital support in the unlikely scenario that the bank's solvability is significantly strained.

ZKB's tangible common equity (TCE) ratio stood at 17.1% as of 30 June 2021, down from 18.3% as of year-end 2020<sup>1</sup>. The decline was driven by 3.9% higher risk-weighted assets (RWA) because of balance sheet growth, while TCE declined by 3.3% from year-end 2020 because ZKB paid out a CHF456 million dividend and for the first time accounted for the expected credit loss on its performing balance sheet and off-balance sheet exposures (following an approach similar to IFRS9)<sup>2</sup>. As of the same date, the bank's regulatory Common Equity Tier 1 (CET1) capital ratio stood at 16.4% (17.4% as of year-end 2020), while its total capital ratio stood at 17.9% (18.9% as of year-end 2020), thereby meeting the going-concern capital requirements for Swiss domestic systemically important institutions, which stipulate a 12.86% total capital ratio. No longer included in these requirements is the countercyclical buffer requirement for residential mortgage exposures, which was revoked by the SNB and FINMA in March 2020 and which had resulted in a 0.7% add-on for ZKB in 2019.

The bank's solid capitalisation levels reflect rising regulatory requirements, largely driven by ZKB's classification as a domestic systemically important institution by decree of the SNB. As of January 2019, new gone-concern capital requirements, equal to 40% of the going-concern capital requirements for domestic systemically important banks such as ZKB came into effect, phasing in until January 2026. Moreover, in September 2019, FINMA levied additional gone-concern capital requirements on ZKB, which will also phase in and result in a total gone-concern capital requirement of 7.9% of RWA in 2026. As of 30 June 2021, the transitional gone-concern add-on stood at 2.9% of RWA, covered by Tier 2 capital instruments and the explicit guarantee of the Canton of Zurich, which can account for 50% of the gone-concern capital requirements and includes the CHF1.0 billion dotation capital reserve mentioned above. In the past, ZKB has taken action to improve its capital buffers above and beyond the increased capital requirements through (1) the issuance of CHF750 million and CHF315 million of high-trigger Additional Tier 1 (AT1) securities in June 2017 and October 2020, respectively; (2) the successful issuance of €500 million of low-trigger Tier 2 capital in 2015; and (3) a CHF500 million and CHF425 million increase in dotation capital made available by the canton in 2015 and 2020, respectively, resulting in a total commitment of CHF3.425 billion at present.

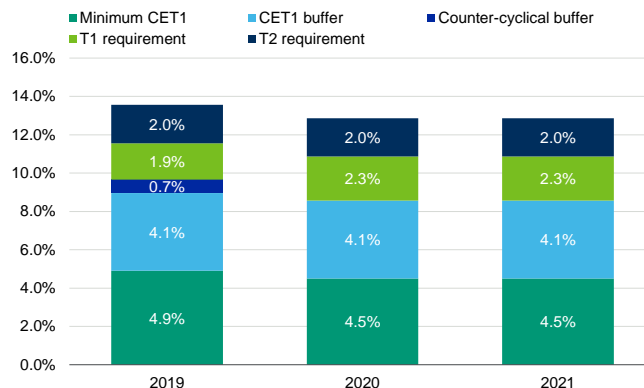
Exhibit 5  
ZKB comfortably exceeds its capital requirements



TCE = Tangible Common Equity (Moody's calculation; excludes high-trigger Additional Tier 1 instruments for all periods); CET1 = Common Equity Tier 1.

Source: Company reports, Moody's Investors Service

Exhibit 6  
ZKB's CET1 capital requirements



The counter-cyclical buffer was revoked in March 2020.

Source: Company reports

### ZKB's diversified earnings support its capital generation capacity

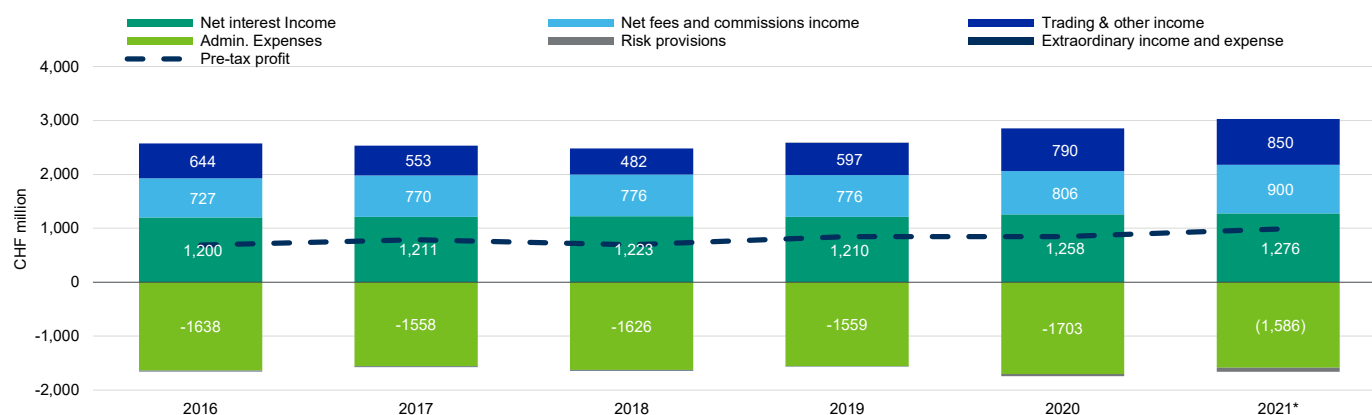
Our ba1 assigned Profitability score, in line with the initial score, captures the somewhat cloudy earnings outlook because of the coronavirus outbreak and the bank's relatively high proportion of earnings from potentially more volatile capital market activities. ZKB's more diversified earnings stream, on the other hand, provides a stabilising factor.

We expect ZKB's profitability metrics to decline slightly. This assessment includes the potential risks or impact of (1) a lower-for-longer interest rate environment; (2) intense competition and continued challenges in the bank's private banking franchise; and (3) potentially higher risk costs because of the coronavirus pandemic. These risks are at least partially offset by the positive effects that the acquisition of the asset manager Swisscanto in 2015 has had on ZKB's revenue mix, lowering the bank's dependence on net interest income and, thereby, stabilising its earnings. In addition, lending volume growth should offset at least some of the net interest margin pressure.

ZKB reported a Moody's-adjusted net profit of CHF486 million in H1 2021, slightly up from the CHF474 million generated in the corresponding 2020 period. The higher net profit was mainly the result of a 5.3% reduction in operating costs to CHF793 million, which was due to 6.6% lower personnel expenses of CHF526 million that were elevated in 2020 because of the bank's 150-year anniversary. The reduced cost base more than offset a 1.0% decline in revenues to CHF1,304 million and higher loan loss provisions of CHF38 million (H1 2020: CHF7 million). The reduction in revenues was primarily driven by a 23.2% decline in trading income to CHF209 million, which offset a 0.6% increase in net interest income to CHF638 million and a 11.4% acceleration in net fee and commission income to CHF450 million. Net interest income was supported by loan growth and the passing on of negative interest rates to major clients, as well as carry gains related to the higher negative interest exemption threshold at the SNB<sup>3</sup>. Net fee and commission income, on the other hand, was supported by higher brokerage and stock exchange fees, higher wealth and asset management fees, as well as the advisory business. Finally, the trading result in H1 2020 had been elevated because of the market turmoil at the height of the coronavirus crisis.

Exhibit 7

### ZKB's large share of fee and commission income diversifies its earnings stream



\*annualised H1 2021

Source: Company reports, Moody's Financial Metrics, Moody's Investors Service estimates

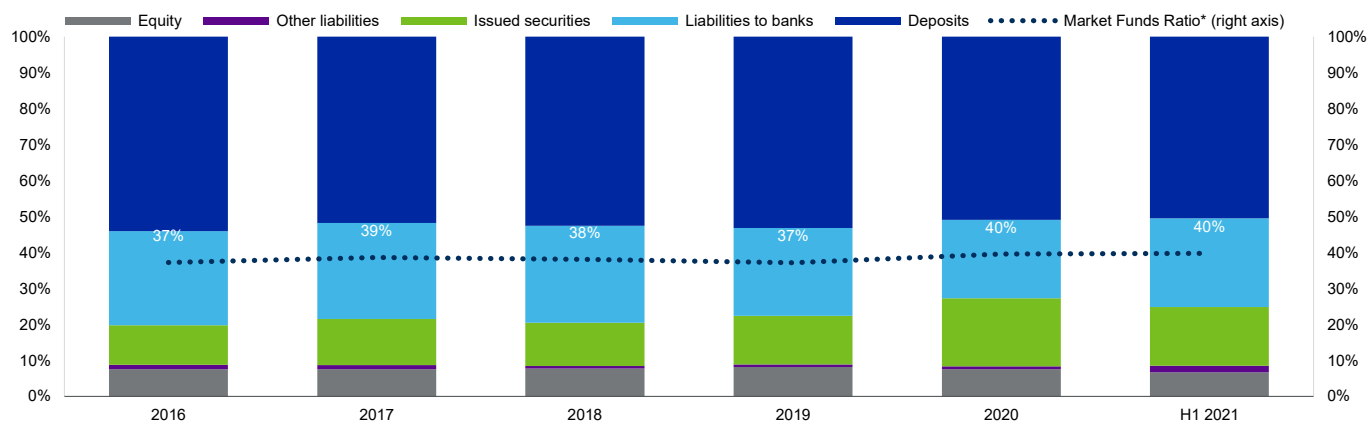
### ZKB's exposure to wholesale funding sources is high, but mitigated by the guarantee

The assigned a1 Funding Structure score, seven notches above the ba2 initial score, reflects the guarantee provided by the canton on ZKB's senior obligations, which results in the bank being regarded as a safe haven in times of market turmoil.

With interbank liabilities of CHF40.3 billion as of 30 June 2021, ZKB is a net borrower in the interbank market and is a frequent bond issuer. Both the bank's interbank liability structure and its market funding benefit from the guarantee provided by the canton.

As of 30 June 2021, ZKB's market funding also consisted of CHF18.6 billion of senior unsecured bond issuances, CHF11.2 billion of covered bonds (sourced via the Pfandbriefzentrale of the Swiss cantonal banks), CHF4.1 billion of structured notes and CHF7.3 billion of repo, trading and derivative liabilities. However, the primary funding source for ZKB was its CHF92.1 billion customer deposit base, resulting in a loan-to-deposit ratio of 108% as of 30 June 2021.

Exhibit 8

**ZKB's market funding reliance remains elevated, but is mostly mitigated by the deficiency guarantee**

\*Market funding ratio = Market funds/tangible banking assets.

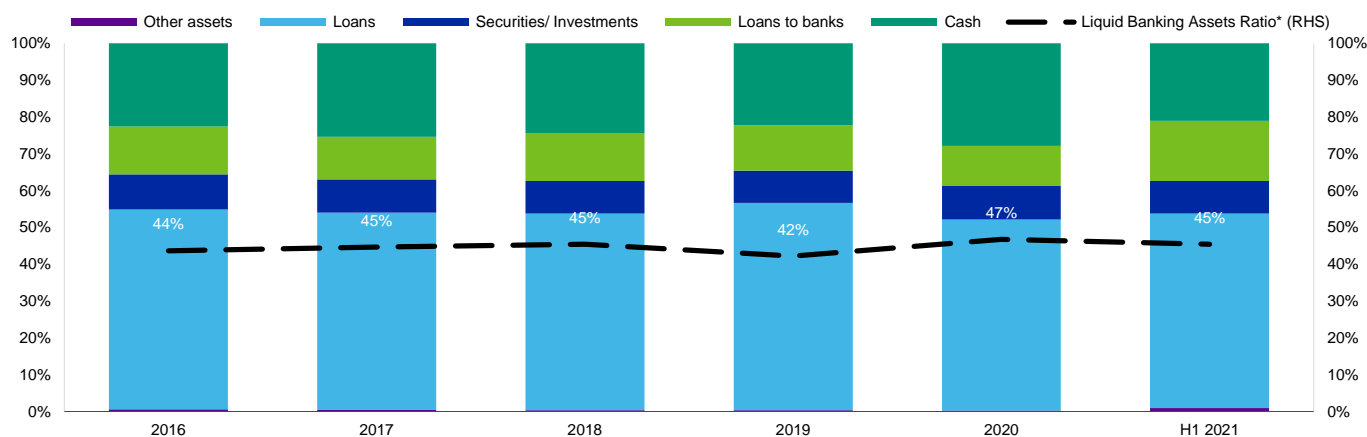
Source: Company reports, Moody's Investors Service

**ZKB benefits from a highly liquid balance sheet**

Our aa2 assigned Liquid Resources score, one notch above the aa3 initial score, takes into account ZKB's highly liquid balance sheet, but also the bank's conservative liquidity management in the context of high wholesale funding with moderate risk of outflow. In addition, the bank has leeway to issue additional covered bonds at short notice to source additional liquidity from the SNB if required.

The bank's market funding reliance is mitigated by its highly liquid balance sheet consisting of CHF39.7 billion of cash as of 30 June 2021, along with around CHF4.5 billion of repo-eligible financial investments, CHF30.8 billion of interbank and other financial institution assets, and CHF11.6 billion of trading assets. The bank's Liquidity Coverage Ratio (LCR) on average stood at 147% during the second quarter of 2021, which the bank gradually increased from the average 123% recorded during the fourth quarter of 2019, reflecting stricter liquidity requirements for systemically important banks in Switzerland that came into effect on 1 January 2021.

Exhibit 9

**ZKB's balance sheet remains highly liquid**

\*Liquid banking asset ratio = Liquid assets/tangible banking assets.

Source: Company reports, Moody's Investors Service



## Environmental, social and governance (ESG) considerations

In line with our general view on the banking sector, ZKB has a low exposure to environmental risks (see our [environmental heat map](#)<sup>4</sup> for further information).

For social risks, we also place ZKB in line with our general view for the banking sector, which indicates a moderate exposure (see our [social heat map](#)<sup>5</sup>). This includes considerations in relation to the coronavirus outbreak, given the substantial implications for public health and safety and the severe and extensive credit shock the pandemic has caused across many sectors, regions and markets.

Governance is highly relevant for ZKB, as it is to all participants in the banking industry. Governance risks are largely internal rather than externally driven, and for ZKB, we do not have any particular governance concerns<sup>6</sup>. Nonetheless, corporate governance remains a key credit consideration and requires ongoing monitoring.

## Support and structural considerations

### Affiliate support

ZKB benefits from parental support from the Canton of Zurich. Parental support materially reduces the probability of default, as it would be available to stabilise a distressed bank and not just compensate for losses in resolution.

We consider an "affiliate-backed" level of support, given the maintenance guarantee the Canton of Zurich extends to ZKB. The maintenance guarantee requires the canton to inject capital into ZKB, in case of need, until the canton defaults itself. Parental support provides three notches of rating uplift from the a1 BCA, leading to an aa1 Adjusted BCA.

### Loss Given Failure analysis

ZKB is subject to Swiss banking regulations, which we consider an operational resolution regime. We therefore apply our Advanced LGF analysis, which takes into consideration the risks faced by the different debt and deposit classes across the liability structure at failure. In our Advanced LGF analysis, we assign a 100% probability to deposits being preferred to senior unsecured debt, thereby reflecting depositor preference by law in Switzerland.

We further assume residual tangible common equity of 3% and losses post-failure of 8% of tangible banking assets. In addition, we assume a 26% share of deposits being "junior" wholesale deposits, for which we factor in a 25% run-off prior to failure, while we assume a 5% run-off in preferred deposits. These ratios are in line with our standard assumptions.

ZKB's senior unsecured debt includes structured products, which are a potentially more volatile funding source. The amount incorporated in our Advanced LGF analysis is the lower of the last reported or three-year average structured product volume and we assume a 50% run-off prior to failure. Structured products issued by Zuercher Kantonalbank Finance (Guernsey) Ltd. are out of scope for our Advanced LGF analysis, since we believe that the Swiss regulator FINMA would have no bail-in powers over this entity.

Our Advanced LGF analysis indicates an extremely low loss given failure and results in one notch (rather than three notches) of rating uplift (because of the Aaa rating ceiling) for junior deposits and counterparty risk liabilities from the bank's aa1 Adjusted BCA, resulting in aaa Preliminary Rating Assessments.

For ZKB's issuer ratings, our Advanced LGF analysis currently yields a moderate loss given failure, resulting in zero notches of rating uplift. However, we continue to assign one notch of rating uplift, reflecting our forward looking assumption that the bank will issue additional loss-absorbing debt instruments over the outlook horizon to address its rising gone-concern capital requirements, thereby increasing the share of liabilities that absorb losses prior to senior unsecured debt instruments, from which the backed issuer ratings are derived. The additional issuance is an important consideration for us to continue to assume a low loss given failure for senior unsecured debt, resulting in a aaa Preliminary Rating Assessment.

### Government support

We assess the probability of sovereign support for ZKB's senior obligations in a stress scenario to be moderate because of the bank's high national market shares in key banking products and its relative importance to Switzerland's banking system. However, since the Canton of Zurich must provide support to ZKB prior to failure because of the maintenance guarantee and given the uplift provided by our Advanced LGF analysis for the bank's senior obligations, ZKB's senior ratings do not benefit from further sovereign government support.



### High-trigger Additional Tier 1 (AT1) securities

The Baa1(hyb) preferred stock rating takes into account that the Swiss regulator FINMA can write-down ZKB's high-trigger AT1 instruments once extraordinary support has been provided by the bank's owner, the Canton of Zurich. We therefore notch these instruments from the bank's a1 BCA, reflective of the bank's intrinsic strength prior to extraordinary support. The Baa1(hyb) rating, positioned three notches below ZKB's BCA, reflects (1) the high loss given failure for the AT1 securities issued by ZKB, which reduces the rating by one notch; and (2) the securities' coupon skip mechanism and write-down features, which reduce the rating by an additional two notches.

### Counterparty Risk Ratings (CRRs)

#### ZKB's backed CRRs are Aaa/P-1

The backed CRRs are positioned one notch above the aa1 Adjusted BCA because of uplift provided by our Advanced LGF analysis.

### Counterparty Risk (CR) Assessment

#### ZKB's backed CR Assessment is Aaa(cr)/P-1(cr)

The backed CR Assessment is positioned one notch above the aa1 Adjusted BCA because of uplift provided by our Advanced LGF analysis.

Because the CR Assessment captures the probability of default on certain senior operational obligations, rather than expected loss, we focus purely on subordination and take no account of the volume of the instrument class.

## Methodology and scorecard

### Methodology

The principal methodology we used in rating ZKB was our [Banks Methodology](#), published in July 2021.

### About Moody's Bank Scorecard

Our Bank Scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology and scorecard factors

Exhibit 10

### Zuercher Kantonalbank

#### Macro Factors

**Weighted Macro Profile**      **Strong +**      **100%**

Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	0.5%	aa2	↔	a2	Quality of assets	Market risk
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	17.1%	aa2	↔	aa2	Expected trend	Risk-weighted capitalisation
Profitability						
Net Income / Tangible Assets	0.5%	ba1	↔	ba1	Return on assets	Expected trend
Combined Solvency Score		a1		a2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	39.6%	ba2	↔	a1	Extent of market funding reliance	Market funding quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	46.7%	aa3	↔	aa2	Additional liquidity resources	Quality of liquid assets
Combined Liquidity Score		baa2		aa3		
Financial Profile				a1		
Qualitative Adjustments				Adjustment		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint				Aaa		
BCA Scorecard-indicated Outcome - Range				aa3 - a2		
Assigned BCA				a1		
Affiliate Support notching				-		
Adjusted BCA				aa1		

Balance Sheet	in-scope (CHF Million)	% in-scope	at-failure (CHF Million)	% at-failure
Other liabilities	76,695	40.8%	87,880	46.8%
Deposits	90,530	48.2%	81,296	43.3%
Preferred deposits	66,992	35.7%	63,643	33.9%
Junior deposits	23,538	12.5%	17,653	9.4%
Senior unsecured bank debt	13,332	7.1%	11,381	6.1%
Dated subordinated bank debt	548	0.3%	548	0.3%
Preference shares (bank)	1,065	0.6%	1,065	0.6%
Equity	5,634	3.0%	5,634	3.0%
Total Tangible Banking Assets	187,804	100.0%	187,804	100.0%

Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF	Assigned	Additional	Preliminary
	Instrument	Sub-	Instrument	Sub-	De Jure	De Facto	Notching	LGF		
	volume +	ordination	volume +	ordination			Guidance	notching	Notching	Rating
	subordination		subordination				vs.			Assessment
							Adjusted			
							BCA			
Counterparty Risk Rating	9.9%	9.9%	9.9%	9.9%	1	1	1	1	0	aaa
Counterparty Risk Assessment	9.9%	9.9%	9.9%	9.9%	2	2	1	1	0	aaa (cr)
Deposits	19.3%	9.9%	19.3%	9.9%	3	3	1	1	0	aaa
Senior unsecured bank debt	9.9%	3.9%	9.9%	3.9%	0	0	0	1	0	aaa
Non-cumulative bank preference shares	3.6%	3.0%	3.6%	3.0%	-1	-1	-1	-1	-5	baa1

Instrument Class	Loss Given	Additional	Preliminary Rating	Government	Local Currency	Foreign
	Failure notching	notching	Assessment	Support notching	Rating	Currency
						Rating
Counterparty Risk Rating	1	0	aaa	0	Aaa	Aaa
Counterparty Risk Assessment	1	0	aaa (cr)	0	Aaa(cr)	
Deposits	1	0	aaa	0	Aaa	Aaa
Senior unsecured bank debt	1	0	aaa	0	Aaa	Aaa
Non-cumulative bank preference shares	-1	-5	baa1	0	Baa1 (hyb)	

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

## Ratings

Exhibit 11

Category	Moody's Rating
<b>ZUERCHER KANTONALBANK</b>	
Outlook	Stable
Bkd Bank Deposits	Aaa/P-1
Baseline Credit Assessment	a1
Adjusted Baseline Credit Assessment	aa1
Bkd Issuer Rating	Aaa
Pref. Stock Non-cumulative -Dom Curr	Baa1 (hyb)

Source: Moody's Investors Service

## Endnotes

- Following the update of our Banks Methodology on 9 July 2021, ZKB's outstanding CHF1,065 million of high-trigger Additional Tier 1 (AT1) instruments are no longer included in TCE, but are instead incorporated in our Advanced LGF analysis.
- The CHF461 million first-time implementation effect of this accounting change was offset against the bank's reserve for general banking risk within shareholders' equity and therefore did not impact the bank's income statement.
- On 1 April 2020, the SNB increased the amount of sight deposits that banks can hold at 0% interest at the central bank to 30x the minimum reserve requirement from 25x previously.
- Environmental risks can be defined as environmental hazards encompassing the impact of air pollution, soil/water pollution, water shortages and natural and man-made hazards (physical risks). Additionally, regulatory or policy risks, such as the impact of carbon regulation or other regulatory restrictions, including related transition risks such as policy, legal, technology and market shifts, that could impair the evaluation of assets are an important factor. Certain banks could face a higher risk from concentrated lending to individual sectors or operations exposed to the aforementioned risks.
- Social risk considerations represent a broad spectrum, including customer relations, human capital, demographic and societal trends, health and safety, and responsible production. The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which is partially offset by sizeable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage because of product mis-selling or other types of misconduct is a further social risk. Societal trends are also relevant in a number of areas, such as shifting customer preferences towards digital banking services increasing information technology costs, ageing population concerns in several countries affecting the demand for financial services or socially driven policy agendas that may translate into regulations that affect banks' revenue bases.
- Corporate governance is a well-established key driver for banks and related risks are typically included in our evaluation of banks' financial profiles. Corporate governance weaknesses can lead to a deterioration in a bank's credit quality, while governance strengths can benefit its credit profile. Further, factors such as specific corporate behaviour, key person risk, insider and related-party risk, strategy and management risk factors and dividend policy may be captured in individual adjustments to the BCA.

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REPORT NUMBER

1304246

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