CFA INSTITUTE RESEARCH CHALLENGE

TEAM D

NEANG

NGOUN

SOTHY

KHENG

RIZA

TEAM OVERVIEW

CamEd Business School
Candidates and Advisor

1. **Chhun Senneang**
   Senior Student
   Bachelor of Accounting and Finance
2. **Rith Riza**
   Senior Student
   Bachelor of Accounting and Finance
3. **Jeung Eangkheng**
   Senior Student
   Bachelor of Accounting and Finance
4. **Sarun Sothy**
   Senior Student
   Bachelor of Accounting and Finance
5. **Tang Hengngoun**
   Senior Student
   Bachelor of Accounting and Finance

Advisor
Muhammad M. Ma’aji
Professor of Finance
CamEd Business School

INTRODUCTION

ACLEDA BANK PLC.

S&P Global
Ratings

Issuer Credit Rating
B+/Stable/B

ផ្សារមូលបត្រកម្ពុជា
CSX

BUSINESS OVERVIEW

1993 NGO

2000 SPECIALIZED BANK

2003-2020 COMMERCIAL BANK

263 branches

54% of depositors
61% of borrowers

26.5% Capital Adequacy Ratio

19% of the sector's interest income

BUSINESS OVERVIEW

Penetration into underbanked provinces enables partnerships with…

NATIONAL SOCIAL SECURITY FUND

FORTE INSURANCE

PRUDENTIAL

Wing

Market Cap: **1.8 billion USD**

Free Float: **1%**

Average Daily Trading Volume: **5000 shares**

Source: Company Data

EXECUTIVE SUMMARY

OVERVALUED

DETERIORATING MARKET SHARE

PRESSURE ON LONG-RUN PROFITABILITY

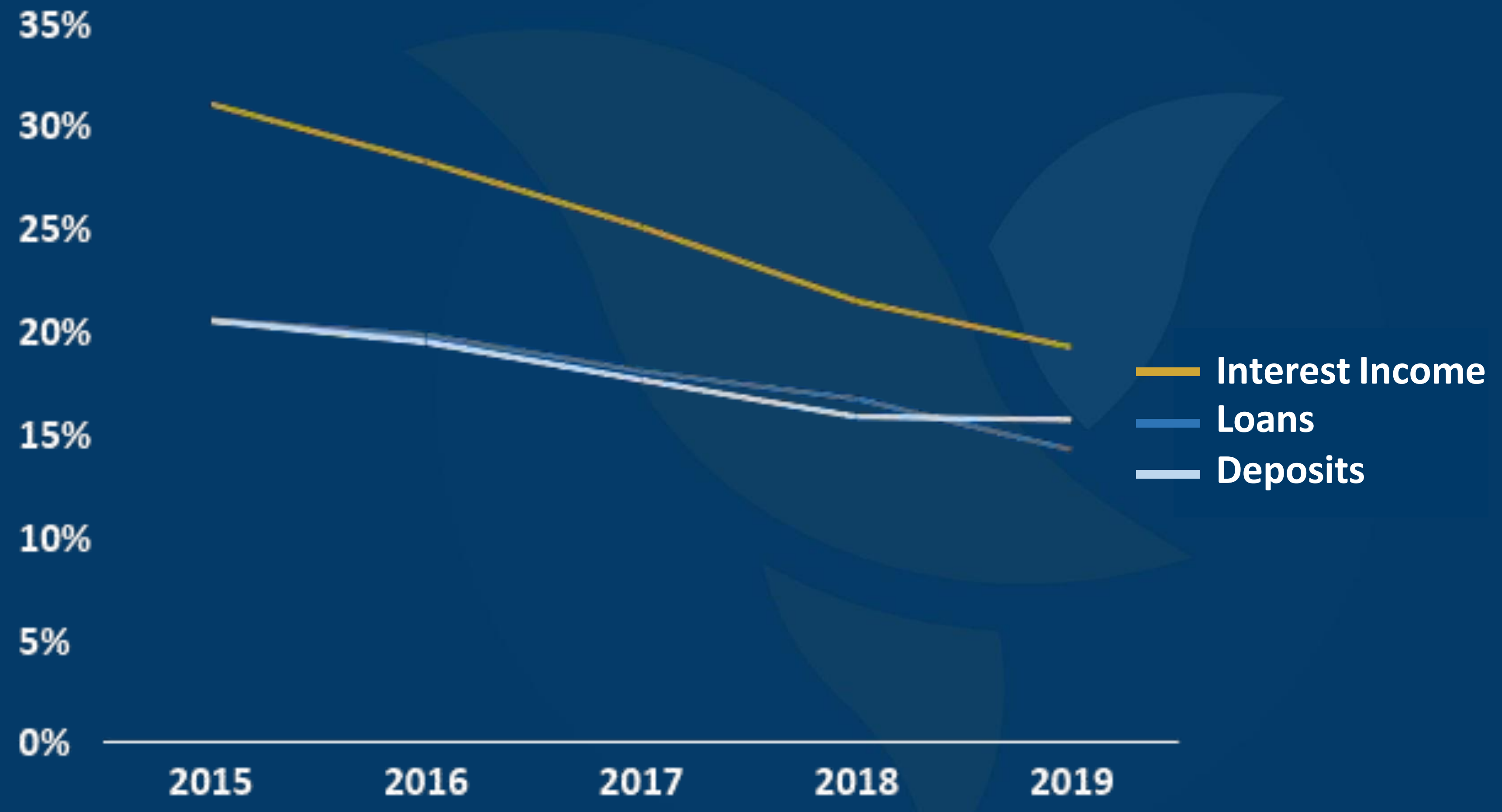
SELL Recommendation

Target Price: KHR **12,049** **(USD 2.98)**

Last Close (8/Jan/21): **KHR 16,860** **(USD 4.16)**

29% DOWNSIDE

DETERIORATING MARKET SHARE



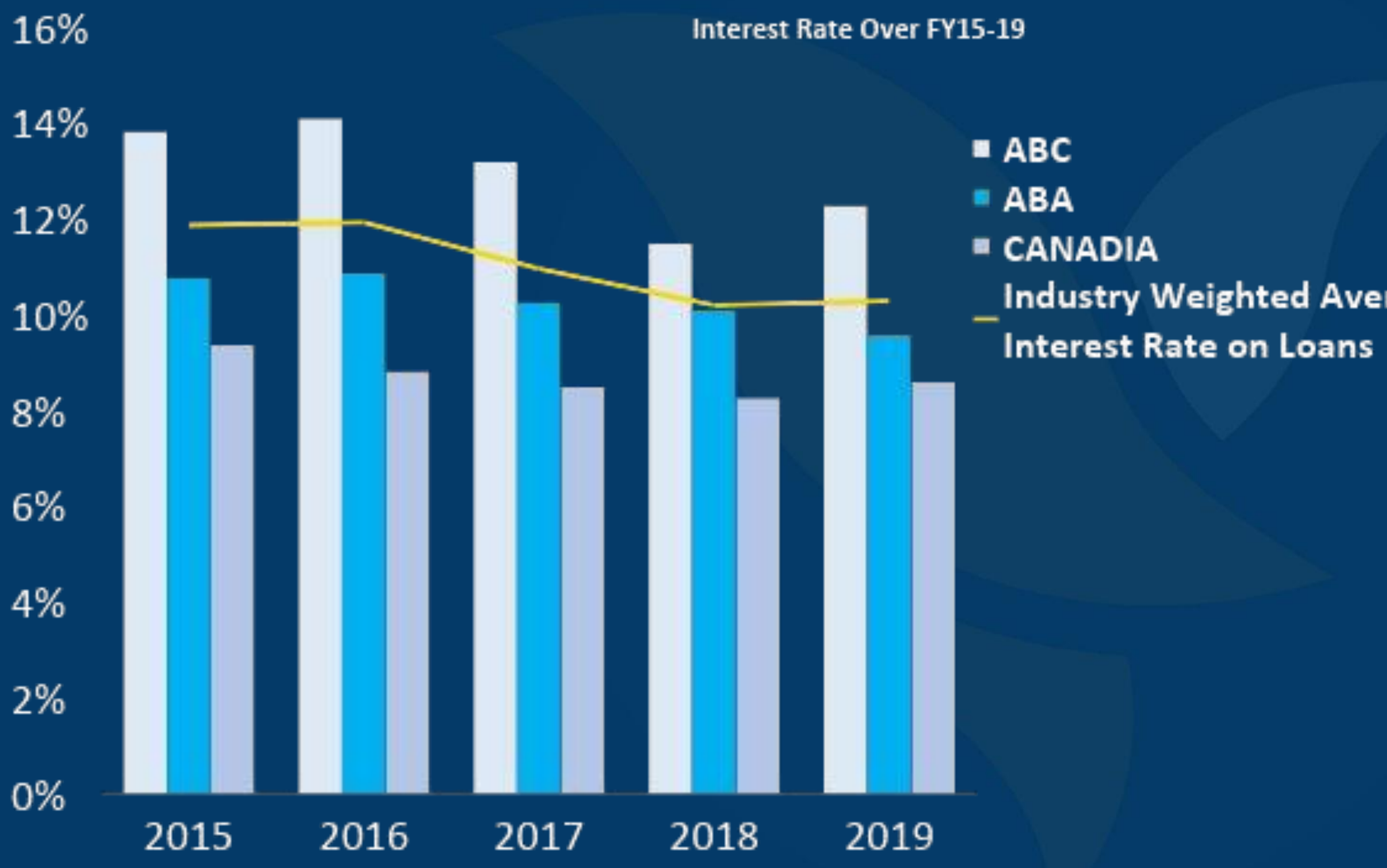
-12%

-8%

-6%

Source: Company Data, Team Analysis

HIGH INTEREST RATES

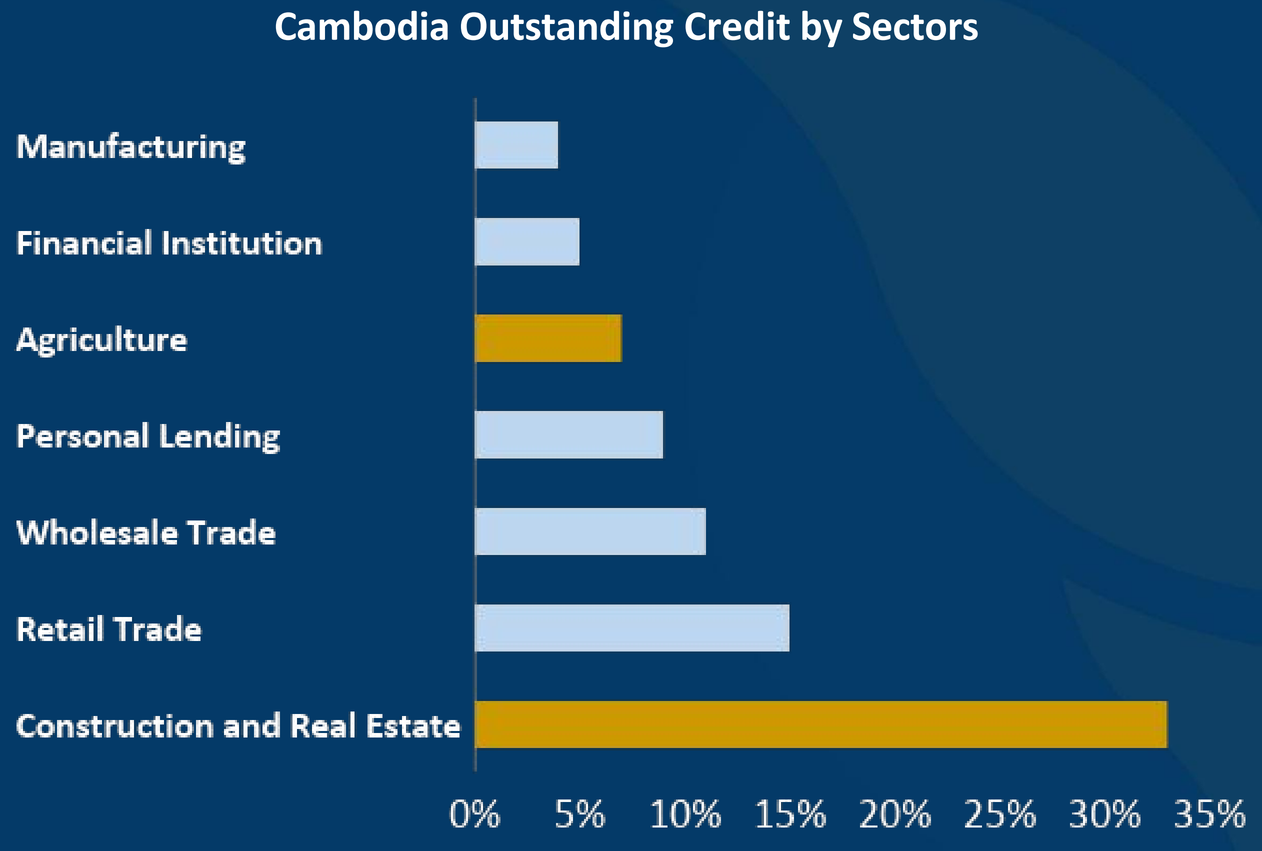


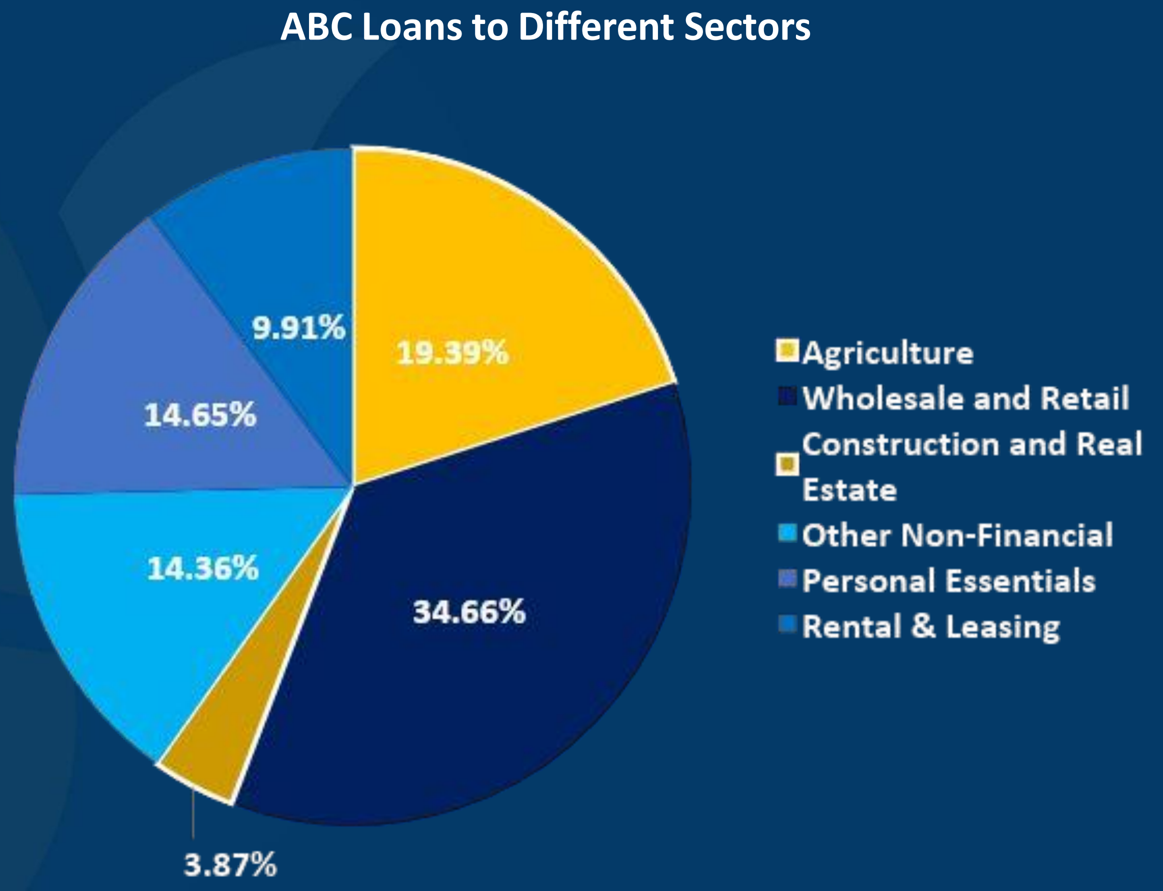
Despite a **decrease** in the industry average…

-3%

Source: Company Data, Team Analysis

LOW GROWTH SECTORS



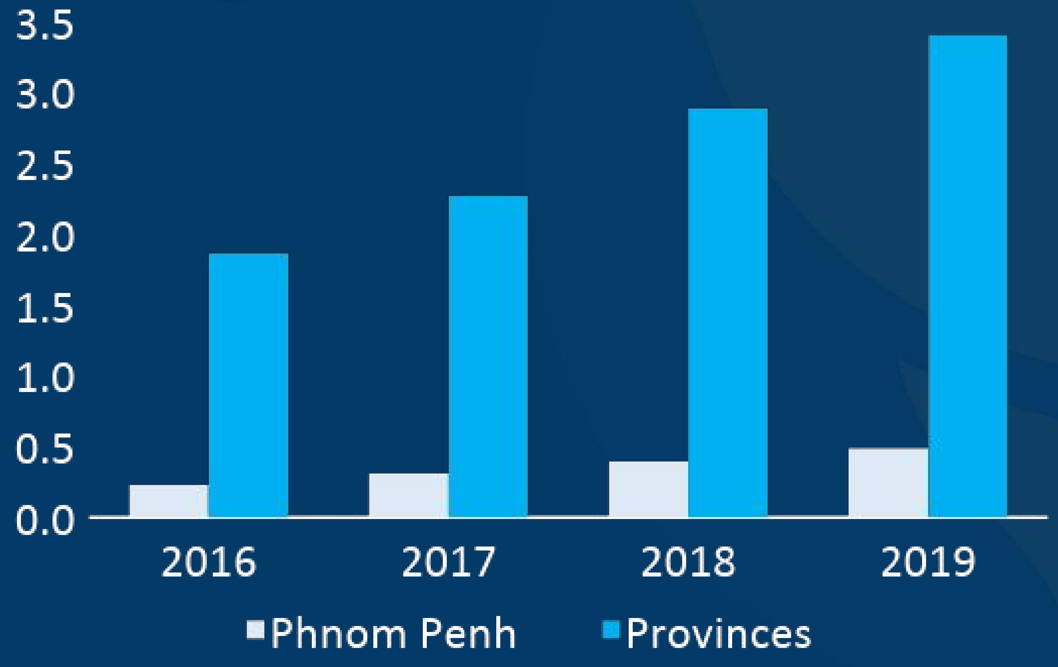


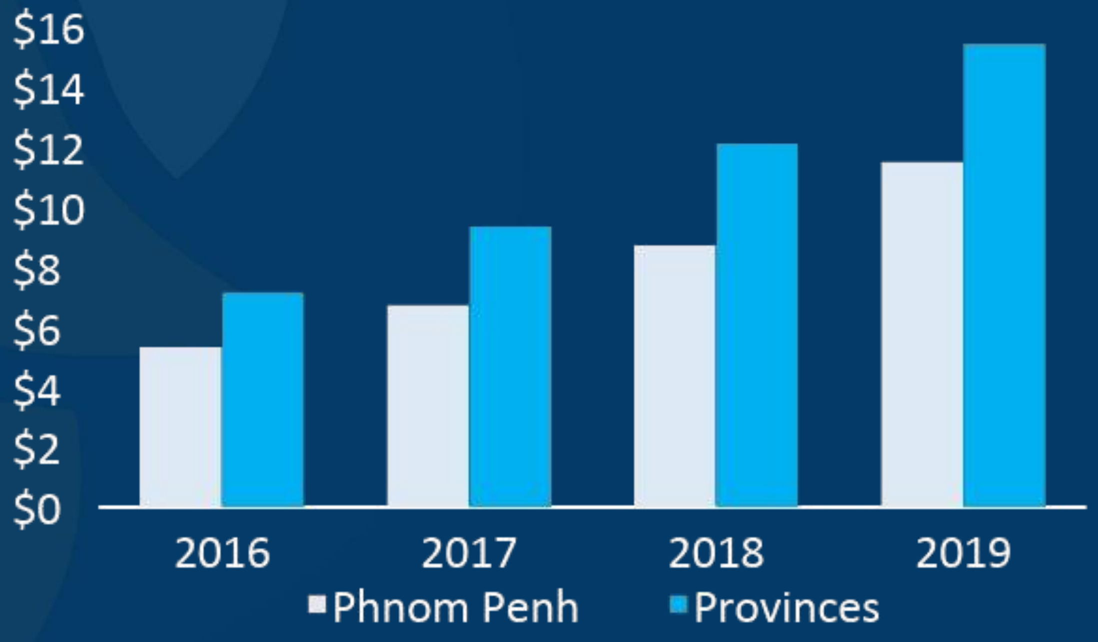
Source: NBC, Company Data, Team Analysis

VOLUME OVER VALUE

88%
of borrowers from provinces

43%
of loans from the capital





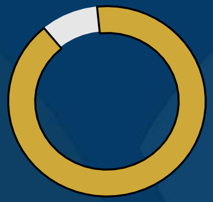
Source: CBC, Team Analysis

USERS' DISSATISFACTION

197 respondents

Based in Phnom Penh

20 banks



96% has bank accounts at **two different banks**

17% **actively** uses ABC

0.4% names ABC as the **most innovative**

Source: Consumer Survey, Team Analysis

ESG INITIATIVES

Environmental — ABC's consumption of fuels decreases at the CAGR of 3%

Social — Donation to support the government against COVID-19

Governance — Established structure in compliance with NBC

Reputation Risk

Predatory Lending

Source: LICADHO, RFA, and ADB

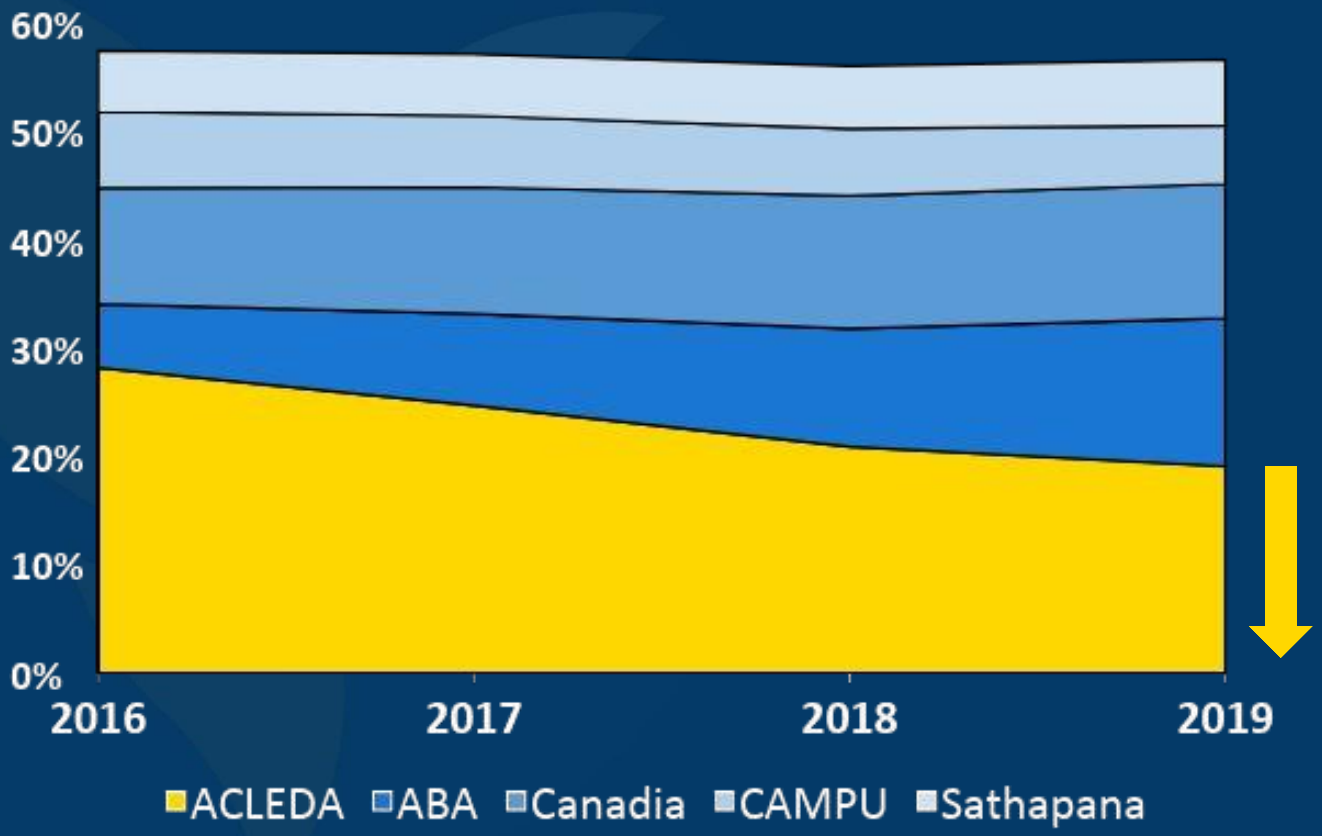
BoD Independence Concern

Source: Company Data

REDUCTION IN REVENUE

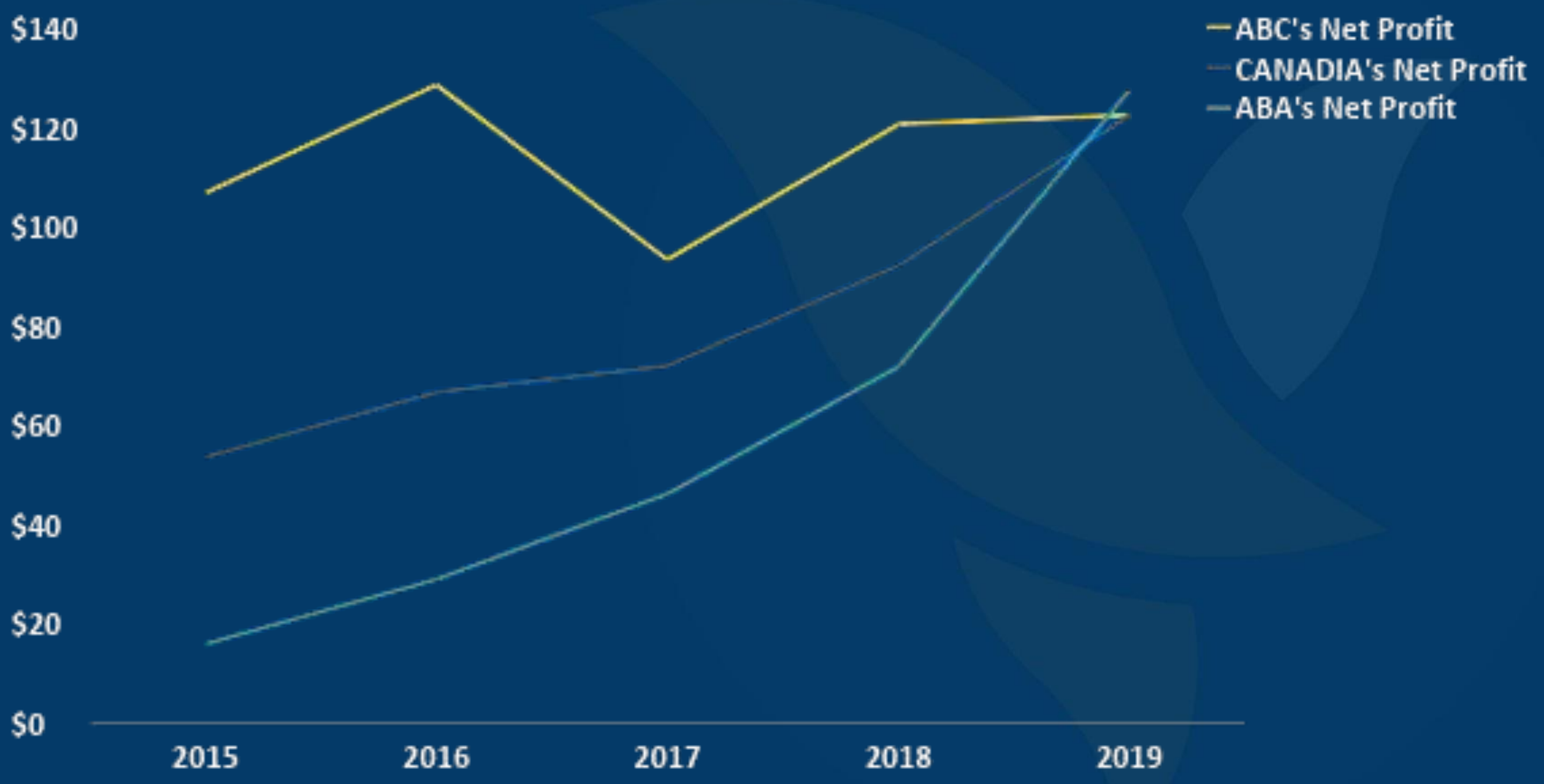
- Loans to Low Growth Sector
- Unpolished Banking Application
- Reputational Risk

Five Major Banks' Revenue in Cambodia



Source: Company Data, Team Analysis

PROFIT PLATEAU



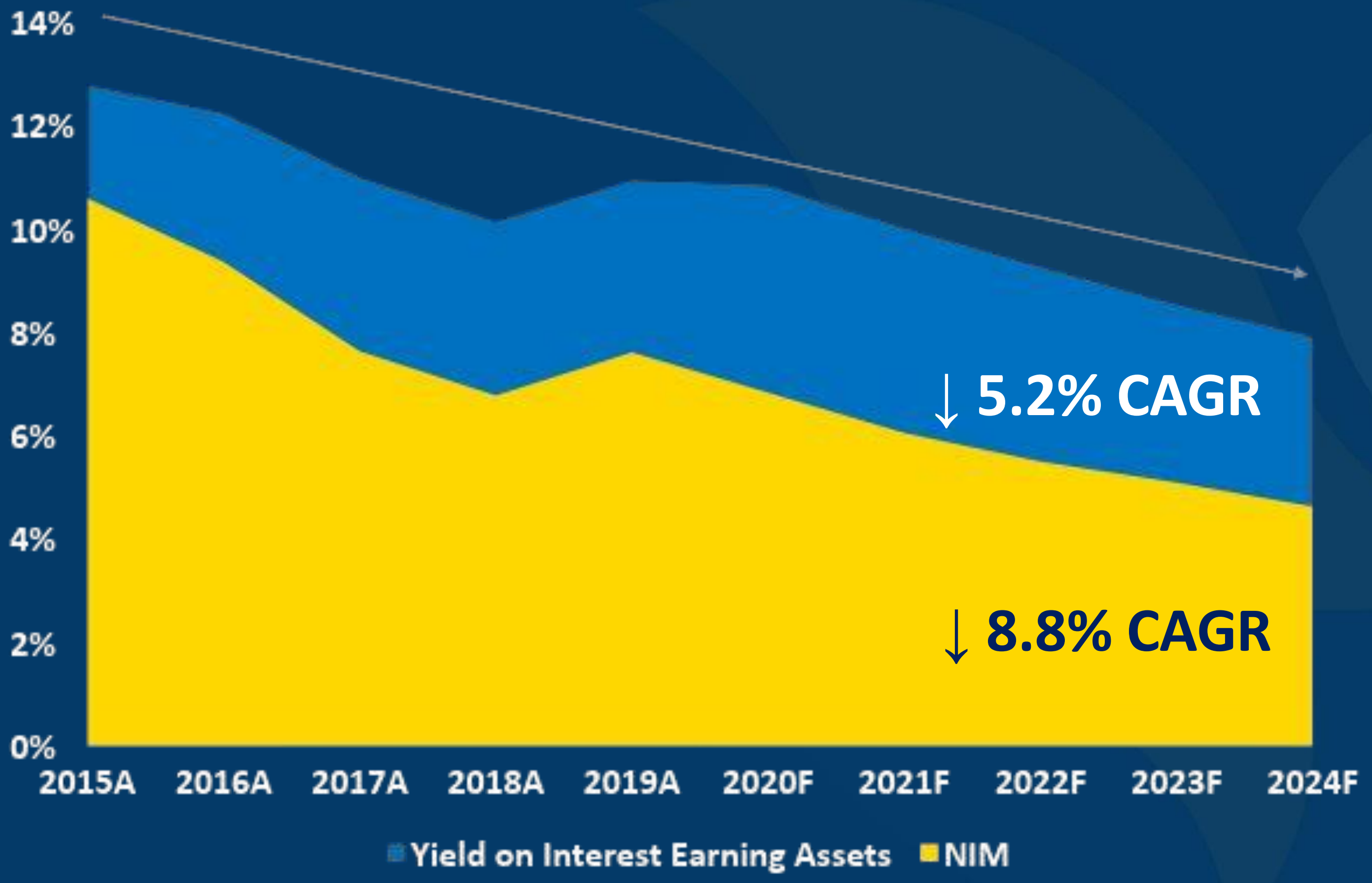
↑ 3% CAGR

↑ 22% CAGR

↑ 68% CAGR

Source: Company Data, Team Analysis

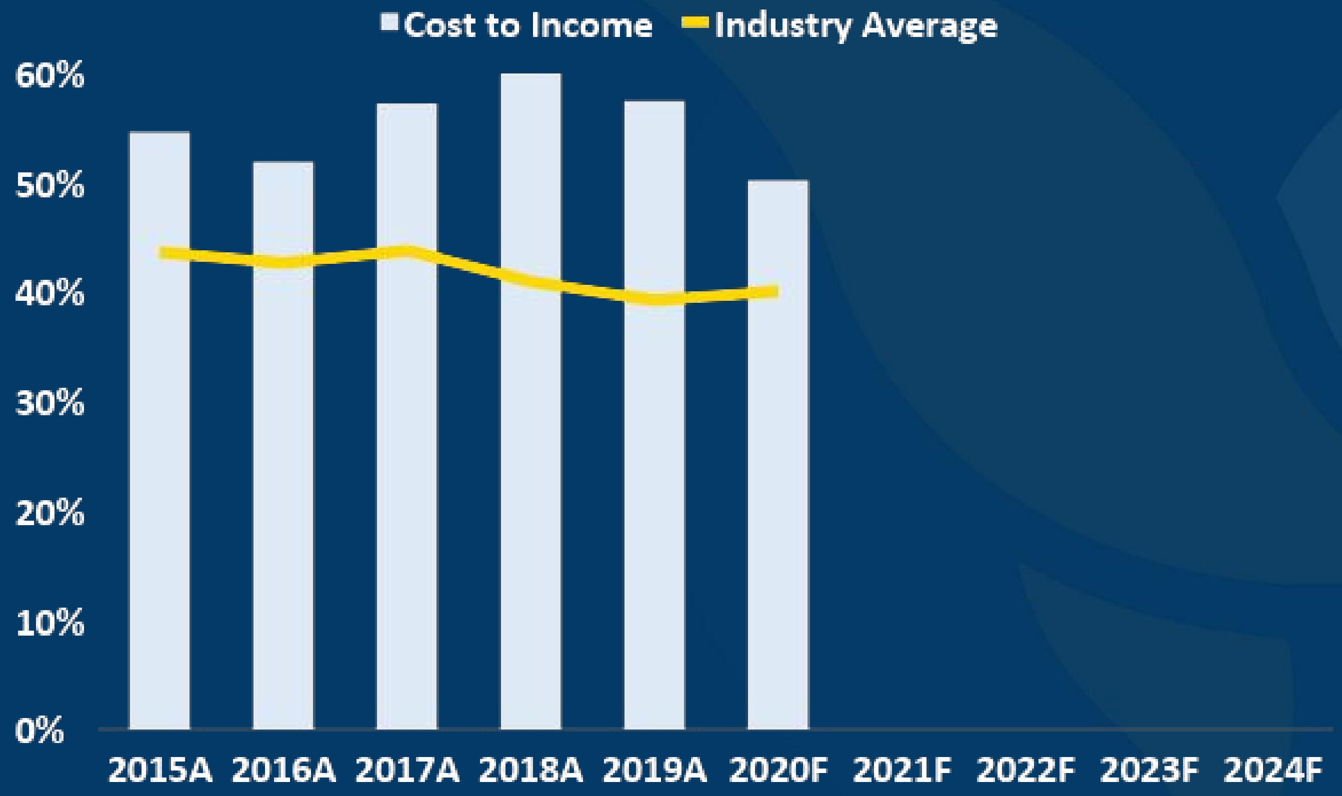
NET INTEREST MARGIN SQUEEZE



- Aggressive Lending Competition
- Increase in Foreign Direct Investment
- Strategy to Promote the Use of KHR

Source: Company Data, Team Analysis

COST-INTENSIVE OPERATION



PHYSICAL BRANCHES

NUMBER OF EMPLOYEES

REBRANDING PROCESS

Source: Company Data, Team Analysis

LIMITED FOREIGN EXPANSION

Subsidiaries' future remain uncertain

	Average Net Profit (M'USD)	Average Total Assets (M'USD)	Average Total Equity (M'USD)	ROA CAGR (FY16-19)	ROE CAGR (FY16-19)
ACLEDA BANK Plc.	102	5,306	801	-10%	-13%
ACLEDA Lao PDR.	3	155	39	-8%	-8%
ACLEDA MFI Myanmar Co.	1	21	10	-20%	11%
	106	5,482	850		

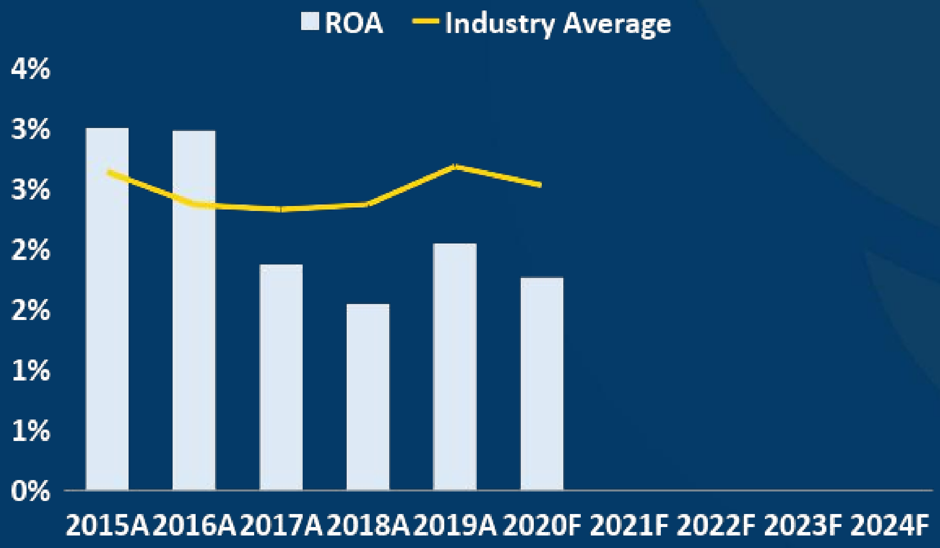
Source: Company Data, Team Analysis

GROWTH STRATEGIES

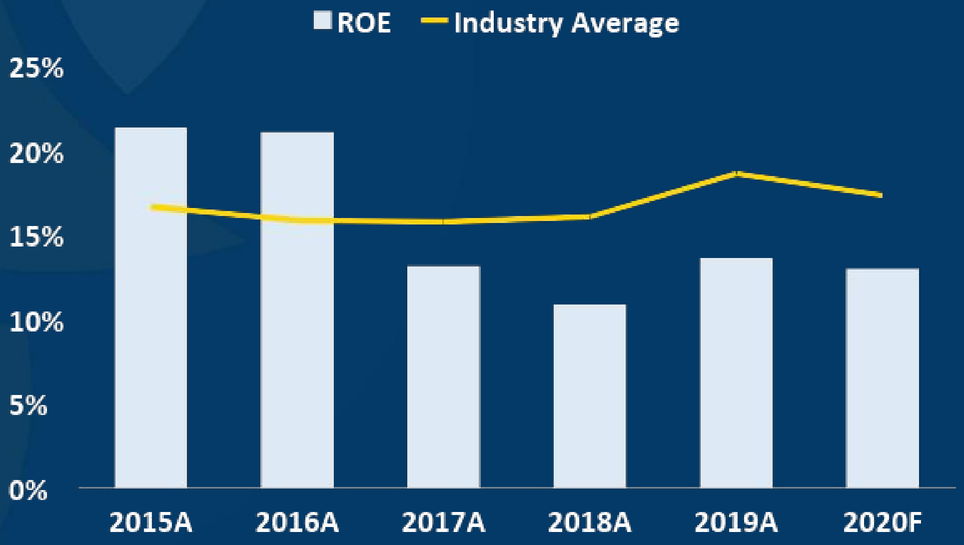
DIVERSIFICATION

DIGITAL BANKING

CONTINUE WITH LENDING STRATEGY



Source: Company Data, Team Analysis



Source: Company Data, Team Analysis

VALUATION

SELL

METHODOLOGY

Dividend Discount Model (DDM) Analysis

Cost of Equity	Terminal Growth Rate
11.4%	4%

KHR 16,860/sh
(USD 4.16)
As of 8/Jan/21

-29%

Downside

KHR 12,049/sh
(USD 2.98)

BULL AND BEAR SCENARIO

KHR 9,898
(USD 2.4)
-41%

KHR 12,049
(USD 2.98)
-29%

KHR 14,476
(USD 3.57)
-14%

Source: Team Analysis

SUPPORTING VALUATION METHODS

		Comparable peers average	Downside risk Across all methods…
Price to Book Value	1.52	1.88	KHR 13,931 USD 3.44
Price to Earning	12.44	14.74	KHR 14,567 USD 3.6
Residual Income Model			-8% KHR 15,515 USD 3.83

Source: Company Data, Team Analysis

SENSITIVITY ANALYSIS

	Cost of Equity					
		9.40%	10.40%	11.40%	12.40%	13.40%
Terminal Growth Rate	5.00%	20,123	16,251	13,593	11,657	10,185
	4.50%	18,305	15,064	12,767	11,055	9,730
	4.00%	16,823	14,063	**12,049**	10,525	9,325
	3.50%	15,593	13,207	11,429	10,054	8,960
	3.00%	14,555	12,466	10,879	9,633	8,630

Based on our valuation

CURRENT PRICE:
KHR 16,860

If the target price is

BUY (>10%)	HOLD (±10%)	SELL (<10%)
> KHR 18,546	KHR 15,174-18,546	<KHR 15,174

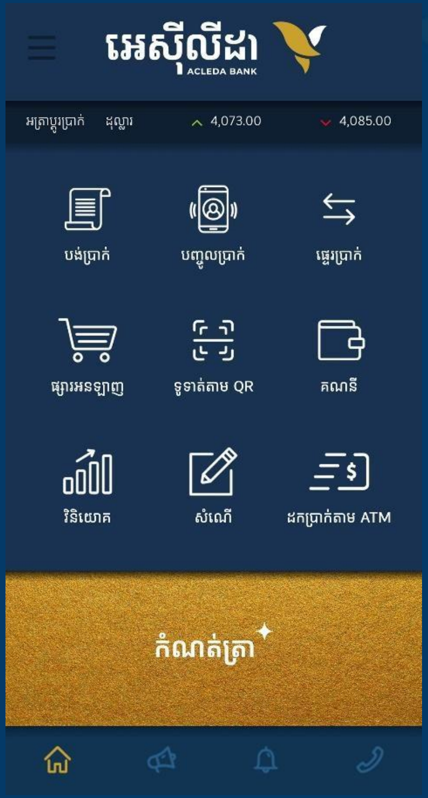
Source: Team Analysis

INVESTMENT RISKS

Impact \ Probability	Low	Medium	High
High	Regulatory Risk	Governance Risk Reputation Risk	Competition Prolonged COVID-19
Medium	Country Risk	Interest Rate Risk Credit Risks Exchange Rate Risk	Capital Gain Tax
Low			

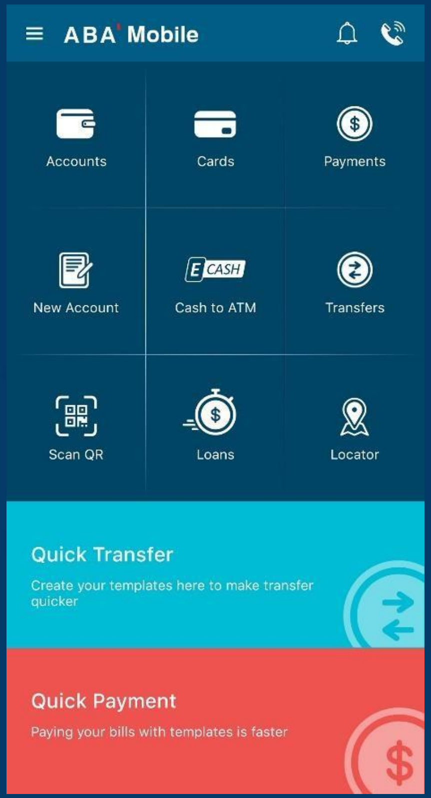
Source: Team Analysis

COMPETITION RISK



ABC Unity ToanChet App

Increases in expenses to keep up with the competition



ABA Mobile Application

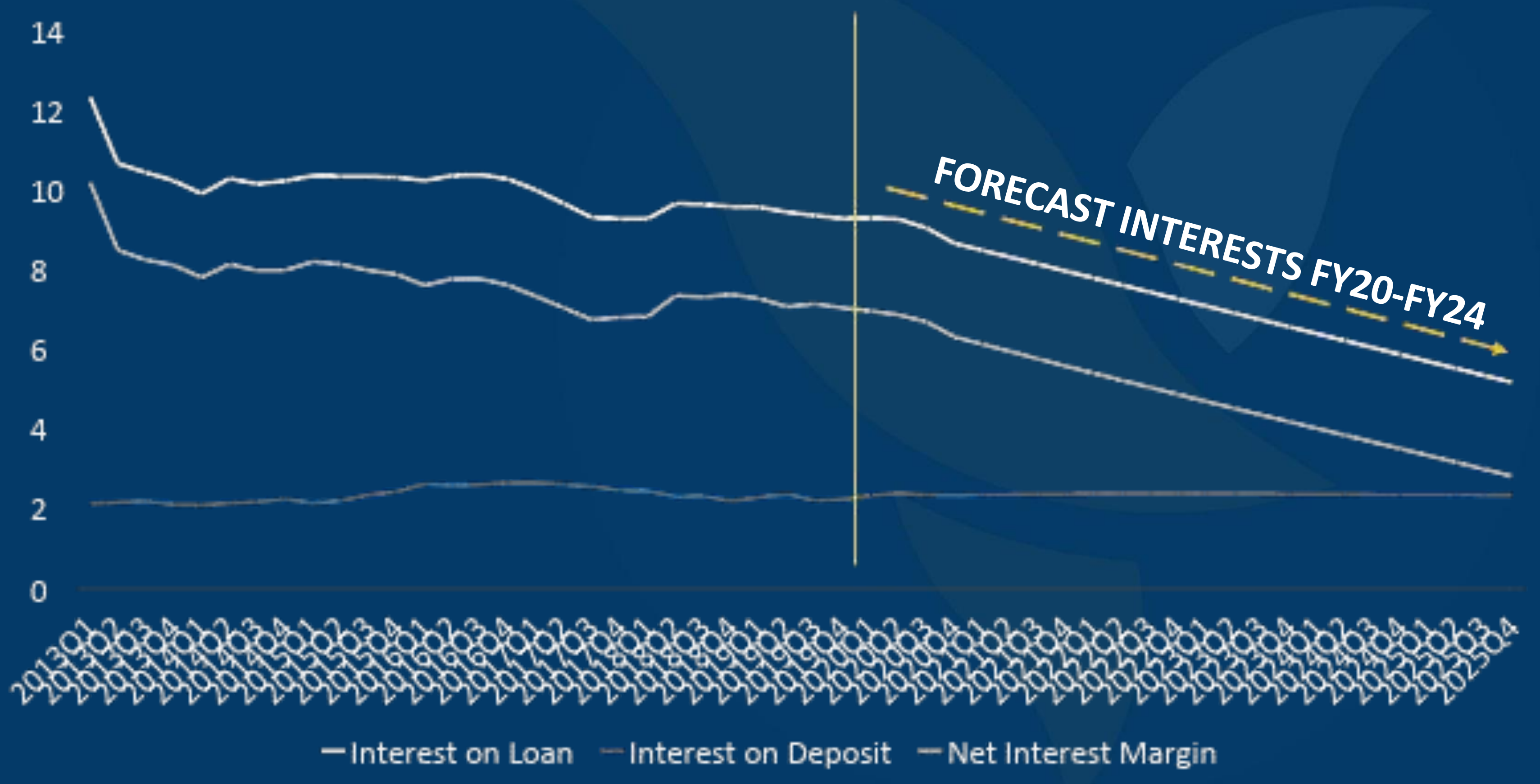
COMPETITION RISK

More competition from **both local** and **foreign banks…**

Source: Team Analysis

INTEREST RATE RISK

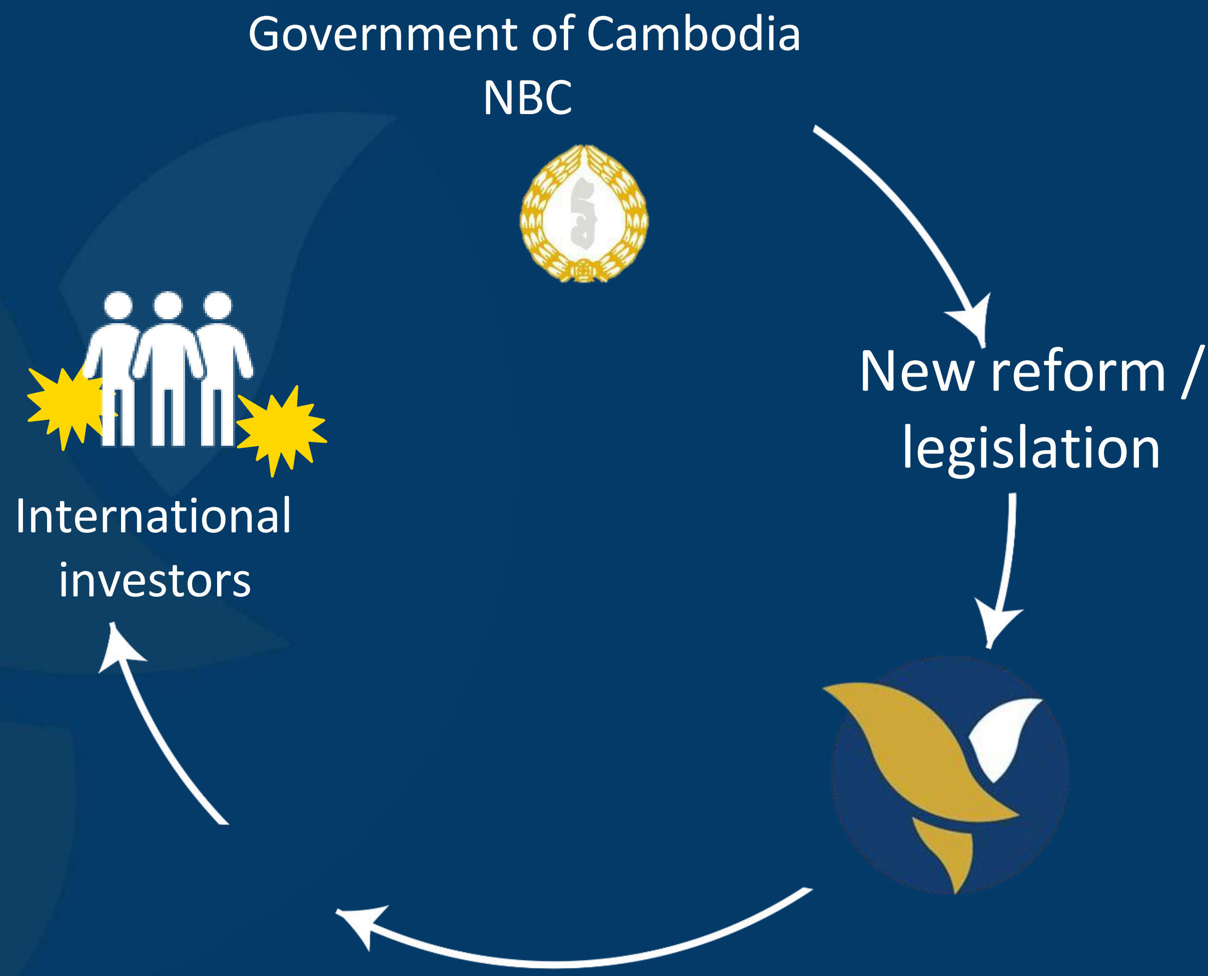
Based on **Autoregressive Integrated Moving Average Model** (ARIMA)



INTEREST RATE SWAPS

CAPITAL GAIN TAX AND PANDEMIC IMPACT

Impact on returns causes investors to think twice



CONCLUSION

- Decreasing Gaps
- Lack of Users' Satisfaction
- Focus on Low Growth Sectors

Deteriorating Market Share

- Increasing Competition
- Unimpressive Growth Strategies
- Expense

Pressure on Long Run Profitability

KHR 16,860/sh
(USD 4.16)
As of 8/Jan/21

29% Downside

OVERVALUED

KHR 12,049/sh
(USD 2.98)

APPENDICES

APPENDIX A: BUSINESS DESCRIPTION

APPENDIX B: ENVIRONMENTAL, SOCIAL AND GOVERNANCE

APPENDIX C: INDUSTRY AND COMPETITIVE POSITIONING

APPENDIX D: FINANCIALS

APPENDIX E: VALUATION

APPENDIX A: BUSINESS DESCRIPTION

APPENDIX A-1: SHAREHOLDER’S OWNERSHIP AS AT 2019

SHAREHOLDERS	OWNERSHIP (%)	SHARE CAPITAL (US$)	NUMBER OF SHARES
ACLEDA Financial Trust	26%	111,492,719	111,492,719
ASA, Plc.	25%	107,204,547	107,204,547
Sumitomo Mitsui Banking Corporation	18%	78,259,310	78,259,310
COFIBRED	12%	52,530,223	52,530,223
ORIX Corporation	12%	52,530,223	52,530,223
Triodos Microfinance Fund	3%	10,938,339	10,938,339
Triodos Fair Share Fund (is owned by Legal Owner Triodos Funds B.V.)	2%	9,354,157	9,354,157
Triodos Sustainable Finance Foundation	2%	6,508,636	6,508,636
Public Investor	1%	4,344,865	4,344,865
TOTAL	**100%**	**$433,163,019**	**433,163,019**

APPENDIX A: BUSINESS DESCRIPTION

APPENDIX A-2: BREAKDOWN OF SUBSIDIARIES

2008

ACLEDA Bank Lao Ltd.

ACLEDA Bank Lao Ltd., which ABC owns 99.90% percent of, began its operation in July, 2008. ACLEDA Bank Lao Ltd. provides various financial services including e-banking, credits, deposits, fund transfers, cash management, trade finance and more. It has a total of 38 branches in the Lao PDR.

2010

ACLEDA SECRUTITIES Plc.

ACLEDA Securities Plc. is a brokerage firm that provides services as a securities brokerage and bondholders representative to individual and institutional customers, investors and the public.

2013

ACLEDA MFI Myanmar Co., Ltd.

ACLEDA MFI Myanmar Co. Ltd. operates as a microfinance institution in the Republic of the Union of Myanmar and has a total of 16 branches.

2016

ACLEDA Institute of Business

AIB is a private higher education institution that provides both higher education services on department of business administration and professional training services in field of finance and banking to local and international students and graduates, participants from other organizations, and the public as well as ACLEDA Bank's staff.

APPENDIX B: ESG

APPENDIX B-1: EVALUATION OF ABC'S ESG

	ENVIRONMENTAL		
Carbon Emissions	Three years of total energy consumption data is disclosed.	3.5	The bank supports renewable energy by providing loans to customers related to Biogas and Solar energy.
Water Consumption	The reduction in water consumption is disclosed	3	The bank disclosed the Water consumption per co-worker
Engergy use	Electricity consumption data is disclosed	3	The bank has controlling the consumption of electricity, Gasoline, Diesel and Lubricant over the year FY15-19
	Average	**3.17**	
	SOCIAL		
Charitable Donations	Total amount of corporate or group donations and community investments made to registered not-for-profit organisations.	3.5	The bank has donating to Cambodian Red cross every year, they also donated to Kantha Bopha Foundation, flood victim, purchased Covid-19 vaccine FY 20.
Staff turnover rates	Full time staff voluntary turnover rate calculated against the average number is disclosed	2.5	ACLEDA has been diclosing the numebr of staffs over the year, without turnover rates.
Employee training hours	Hours spent on employee development training is disclosed	2.5	The bank only disclosed the number of staff undertaking the training over the last 5 years
Employee satisfactions	The right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work and education is disclosed	3	ACLEDA is known as 'equal opportunity' employer. Apart from those jobs which involve a higher physical risk, regardless of gender or physical disability. The bank has disclosed.
	Average	**2.88**	
	GOVERNANCE		
Female directors	Number and percentage of women on the board. Companies should be clear who specifically on their Board is female.	3.7	The bank has shown clearly the Board of Directors' members who is female. More importantly, the management team also consists of female.
Independent Directors	Number and percentage of independent Directors on the board	3	The Board Audit Committee is chaired by Mr. Ian S. Lydall who is an independent director.The board 80% are non-executive and independent non-executive director.
	Average	**3.35**	

APPENDIX C: INDUSTRY ANALYSIS

APPENDIX C-2: SWOT ANALYSIS

STRENGTHS	WEAKNESS
• High brand awareness • Extensive branch network • Independent from volatile sectors such as hospitality and real estate	• Slower growth due to poor profitability • Too slow to adapt to change • Late to capture the digital payment segment • Brand lacks appeal toward younger demographic
OPPORTUNITIES	**THREATS**
• Growth of subsidiaries in foreign market • Penetration into under-banked population • Obtain more customers through government and corporate partnerships	• Disruptive new competitors • Low growth in key sectors • Loss of market share • Declining economic conditions • Incremental loss of market share

APPENDIX C : INDUSTRY ANALYSIS

APPENDIX C-3: CONSUMER SURVEY

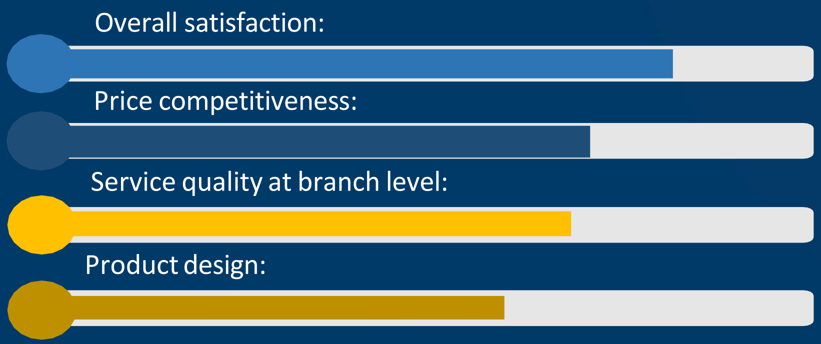
96% has bank accounts at **two different banks**

42.1% has an **account** with ABC

17% **actively** uses ABC

0.4% names ABC as the **most innovative**

Level of satisfaction with ABC:



Highlighted comments about ABC:

*"Has been **around for a long time**."*

*"It is **everywhere**."*

APPENDIX D: FINANCIALS

APPENDIX D-1: STATEMENT OF PROFIT OR LOSS FORECAST ASSUMPTIONS

LINE ITEM	ASSUMPTIONS
Interest Income	Interest Income = expected AVG lending rate * expected gross loan · Expected gross loan is determined by the linear regression model (see Appendix -4 for more details) · Expected AVG lending rate is based on ARIMA (see Appendix -5 for more details)
Fee and Commission Income	From FY15-19, fee and commission income, on average, increased at 10.08%. We expect this momentum will continue in our forecastable periods because · ABC's dominance in payment cards and ATM and the trend towards cashless society as per described in the SWOT Analysis · The boost in the payment ecosystem as result of developing mobile banking application. Thus, increase in cross-selling businesses. · The development of the country's financial sector gives rise to an opportunity to add more non-banking services into ABC's current activity lines.
Fee and Commission Expense	From FY15-19, fee and commission expense, on average, increased at 4.25%. However, we expect an opposite trend during our forecastable period (i.e. -4.25% P.a.) because: · Referral services may no longer be the driver of the bank's loans and deposits because of its well-established business networks, its relationship maintenance with existing clients, and its brand goodwill · The trend toward digital banking where loanees are able to apply for loan online
Provision for Loans	We expect the provision for gross loan (NPL) to double in FY20 before turning back to its present state because: · World Bank projects the NPA in Asia Pacific, which also include Cambodia, to increase, and Cambodia's GDP growth is going to hit its slowest since 1994. · The impact of systematic risk (COVID-19, EBA withdrawal, PRAKAS to restructure loan agreements) in 2020 · ADB projects Cambodia GDP to rebound · The fading of the above systematic risk, especially COVID-19 after FY20
General Expense	Based upon the financial analysis for both ABC and selected peers, we can see that ABC's AROE is below the industry benchmark for 2 reasons: · ABC uses more equity than its peers · ABC has more physical branches. Therefore, it has higher general expenses leading to minimized profit. We assume ABC to direct its AROE to the industry benchmark by 2 possible ways: · Postpone its use of equity as the main source of finance · Minimize its general expenses to reach the target net profit that would achieve the industry AROE We assume that there is an equal chance of existence to the above 2 assumptions: · By holding average equity constant, ABC must reduce its general expense by 8.85% to reach the industry AROE of 16.5%. · However, since there is only a 50% possibility for this to occur, we expect general expense to decreased by 4.42% during our forecastable period.

APPENDIX D : FINANCIALS

APPENDIX D-2: STATEMENT OF FINANCIAL POSITION FORECAST ASSUMPTIONS

LINE ITEM	ASSUMPTIONS
Deposits from Customers	We expect deposit from customer to increase by 1% YoY Basis because: · When the bank continuously improves its mobile banking application, this will attract new understand new users mean more deposit · The evolvement of Cambodia Trading Exchange means more investors will deposit their money in the trading account to trade.
Statutory Deposit	We expect statutory deposit to decrease around 10% in FY20 and then increased by 1% on a YoY basis before turning back to its current state in FY24 because: · NBC may try to increase the money supply during the COVID-19 · NBC's intention to promote KHR in the Kingdom may mean to encourage banks to disburse more domestic currency
Loans and Advances, Net	As per credit forecast based upon the linear regression model, we have determined the total credit in the Kingdom of Cambodia during our forecastable periods. We assume ABC is able to cut the pie of our forecasted total credit based upon the following drivers: · Investment in intangible asset will drive the market share · Increase in fee & commission income means Increase in market share · Increase in deposit means increase in market share
Other Assets	We expect the growth in financial investments, other assets, deposits and placement with other banks, and other income to remain stable because these financial statement captions are immaterial to ABC's competitive position. Therefore, the bank may save its scarce resources for other much fruitful investments.
Property, Plants and Equipment	We assume ABC is going to replace its depreciated PPE with the right of use asset (lease) . We assume ABC is going to direct all the PPE replacement cost to invest in intangible asset.

APPENDIX D : FINANCIALS

APPENDIX D-3: INTEREST EARNING ASSETS

IEA	2015A	2016A	2017A	2018A	2019A	2020F	2021F	2022F	2023F	2024F
Gross Loan:										
Small Loan	4,951,057	5,435,006	5,956,172	7,001,960	8,184,105	8,877,048	9,906,589	11,636,469	15,232,196	20,549,626
Staff Housing Loan	118,224	140,037	138,146	136,142	135,209	192,096	209,976	236,477	301,230	407,723
Public Housing Loan	591,866	701,070	691,601	681,571	611,705	946,466	1,030,846	1,155,389	1,463,664	1,969,591
Staff Loan	284,108	316,554	445,576	550,391	690,099	629,923	729,654	891,341	1,171,956	1,574,376
Overdraft Loan	129,043	154,887	189,334	242,110	195,322	256,264	291,494	344,455	444,558	578,066
Home Improvement Loan	156,982	169,770	284,034	404,736	304,963	365,002	425,822	526,307	681,817	867,387
Personal & Others Loan	233,034	311,866	310,698	400,670	487,964	486,238	557,772	652,772	865,877	1,166,630
Credit Card Loan	50,406	54,451	70,673	70,174	68,832	89,326	99,453	116,865	147,697	197,946
Trade Loan	32,550	35,731	39,157	46,033	50,784	57,655	64,185	75,181	98,084	131,782
Revolving Loan	287,521	523,215	426,977	257,985	157,830	492,490	544,512	547,726	645,654	893,337
Medium Loan	3,535,255	3,880,814	4,252,947	4,787,730	4,922,000	6,069,594	6,714,005	7,805,638	10,092,311	13,530,176
Total Gross Loans	**10,370,045**	**11,723,402**	**12,805,315**	**14,579,502**	**15,808,814**	**18,462,101**	**20,574,309**	**23,988,622**	**31,145,044**	**41,866,640**
Financial investments	954,035	1,978,561	2,864,627	2,490,140	2,148,835	2,202,859	2,469,736	2,879,590	3,738,646	5,025,664
Deposits and placements with other banks:										
Banks outside Cambodia	497,196	329,156	460,751	105,402	485,380	280,322	314,283	366,439	475,757	639,535
Banks inside Cambodia	17,138	21,340	24,719	2,468	6,436	8,829	9,899	11,541	14,984	20,143
Total IEA	**11,838,414**	**14,052,458**	**16,155,411**	**17,177,512**	**18,449,466**	**20,954,111**	**23,368,227**	**27,246,192**	**35,374,430**	**47,551,981**
Average IEA	**11,246,493**	**12,945,436**	**15,103,934**	**16,666,461**	**17,813,489**	**19,701,788**	**22,161,169**	**25,307,209**	**31,310,311**	**41,463,206**
Risk-weighted Assets	9,828,041	11,846,470	12,913,453	14,460,209	15,434,344	16,356,075	18,397,809	20,944,630	26,090,032	34,479,364
RWA % of IEA	**83%**	**84%**	**80%**	**84%**	**84%**	**83%**	**83%**	**83%**	**83%**	**83%**
Interest income earned:										
Gross Loans	1,432,242	1,651,479	1,686,020	1,806,314	1,928,597	2,208,183	2,286,981	2,469,130	2,951,189	3,681,596
Financial Investments	3,115	10,202	28,301	17,754	22,622	25,901	26,826	28,962	34,617	43,184
Deposits and placements with other banks:										
Banks outside Cambodia	516	983	2,213	8,236	7,677	8,789	9,103	9,828	11,747	14,654
Banks inside Cambodia	488	280	586	436	422	484	501	541	647	807
Total interest earned	**1,436,360**	**1,662,944**	**1,717,120**	**1,834,612**	**1,959,318**	**2,243,358**	**2,323,411**	**2,508,461**	**2,998,199**	**63,740,241**
Average yield earned on:										
Total gross loan	13.81%	14.09%	13.17%	12.39%	12.20%	11.96%	11.12%	10.29%	9.48%	8.79%
Financial Investments	0.33%	0.52%	0.99%	0.71%	1.05%	1.18%	1.09%	1.01%	0.93%	0.86%
Deposits and placements with other banks:										
Banks outside Cambodia	0.10%	0.30%	0.48%	7.81%	1.58%	3.14%	2.90%	2.68%	2.47%	2.29%
Banks inside Cambodia	2.84%	1.31%	2.37%	17.68%	6.56%	5.48%	5.06%	4.69%	4.31%	4.00%
Total IEA	**12.77%**	**12.85%**	**11.37%**	**11.01%**	**11.00%**	**11.39%**	**10.48%**	**9.91%**	**9.58%**	**9.02%**

APPENDIX D : FINANCIALS

APPENDIX D-4: INTEREST BEARING LIABILITIES

IBL	2015A	2016A	2017A	2018A	2019A	2020F	2021F	2022F	2023F	2024F
Deposits and placements of other banks	1,277,938	1,459,029	857,681	1,158,644	1,162,089	1,343,692	1,482,595	1,711,517	2,200,105	2,928,203
Current accounts	110,752	272,902	352,392	466,191	421,492	483,729	533,734	616,146	792,038	1,054,153
Savings deposits	442,549	577,896	161,583	258,506	194,540	228,428	252,041	290,958	374,018	497,795
Fixed deposits	724,637	608,231	343,706	433,947	546,057	631,535	696,820	804,413	1,034,049	1,376,256
Deposit from customers	9,639,406	11,161,326	12,584,176	14,368,738	16,637,096	20,580,719	22,708,231	26,214,525	33,698,010	44,849,959
Current accounts	969,507	1,088,868	1,348,096	1,613,494	2,062,073	2,675,493	2,952,070	3,407,888	4,380,741	5,830,495
Savings deposits	3,839,504	4,279,105	5,077,874	6,352,655	7,199,851	8,849,709	9,764,540	11,272,246	14,490,144	19,285,482
Fixed deposits	4,830,394	5,793,352	6,158,206	6,402,589	7,375,172	9,055,516	9,991,622	11,534,391	14,827,125	19,733,982
Borrowings	1,717,684	2,487,051	3,659,049	3,175,266	2,302,260	4,207,843	4,814,026	5,762,265	7,680,361	10,599,017
Subordinated debts	368,550	441,648	438,758	311,270	567,658	1,037,509	1,186,973	1,420,776	1,893,713	2,613,353
Total IBL	13,003,577	15,549,053	17,539,663	19,013,918	20,669,102	27,169,763	30,191,826	35,109,083	45,472,190	60,990,531
Average IBL	12353399	14,276,315	16,544,358	18,276,791	19,841,510	23,919,433	28,680,794	32,650,454	40,290,636	53,231,360
% to total IBL										
Deposits and placements of other banks	9.8%	9.4%	4.9%	6.1%	5.6%	4.9%	4.9%	4.9%	4.8%	4.8%
Deposit from customers	74%	72%	72%	76%	80%	75%	75%	75%	74%	73%
Borrowings	13%	16%	21%	17%	11%	15%	16%	16%	17%	17%
Subordinated debts	3%	3%	3%	2%	3%	4%	4%	4%	4%	5%
Total interest bearing liabilities	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Interest expense paid on:										
Deposits and placements of other banks										
Fixed deposits	2,525	18,459	20,364	19,192	30,351	34,555	37,323	42,321	53,160	68,939
Savings deposits	252.92	290	326	304	154	391	422	479	601	780
Current accounts	7	10	12	1	0	7	7	8	10	13
Deposits from customers:						0	0	0	0	0
Fixed deposits	249,972	287,511	317,178	298,917	332,641	470,464	508,150	576,195	723,767	938,601
Savings deposits	25,039	24,814	27,888	26,056	23,755	38,597	41,689	47,271	59,378	77,003
Current accounts	705.09	894	1,152	996	195	1,174	1,268	1,438	1,806	2,343
Subordinated debts	35,884	35,585	37,254	33,032	30,498	50,083	54,095	61,339	77,048	99,919
Borrowings	79,225	131,110	194,261	240,810	209,580	319,602	345,203	391,429	491,680	637,624
Provident fund	3,127	4,752	5,668	491	-	4,691	5,067	5,745	7,217	9,359
Interest expenses on lease	-	-	-	-	8,473	-	-	-	-	-
Interest paid on total IBL	396,737	503,425	604,102	619,799	635,648	922,098	995,961	1,129,328	1,418,566	1,839,634
Average interest rate paid on:										
CASA	0.54%	0.48%	0.45%	0.34%	0.26%	0.35%	0.34%	0.33%	0.32%	0.32%
Term deposit	5.17%	4.96%	5.15%	4.67%	4.51%	5.20%	5.09%	5.00%	4.88%	4.76%
Deposits and placements of other banks	0.24%	1.58%	4.09%	2.82%	4.12%	4.06%	3.98%	3.91%	3.82%	3.72%
Subordinated debts	9.74%	8.06%	8.49%	10.61%	5.37%	4.83%	4.56%	4.32%	4.07%	3.82%
Borrowings	4.61%	5.27%	5.31%	7.58%	9.10%	7.60%	7.17%	6.79%	6.40%	6.02%
Other liabilities	0.03%	0.03%	0.03%	0.00%	0.04%	0.02%	0.02%	0.02%	0.02%	0.02%
Total IBL	3.21%	3.53%	3.65%	3.39%	3.20%	3.86%	3.47%	3.46%	3.52%	3.46%

APPENDIX D : FINANCIALS

APPENDIX D-5: KEY FINANCIAL RATIOS

KEY RATIOS	HISTORICAL			PROJECTED				
	2017A	2018A	2019A	2020F	2021F	2022F	2023F	2024F
Capital Ratios								
Equity to Asset Ratio	14.11%	14.29%	15.62%	12%	11%	10%	8%	6%
Debt to Equity Ratio	6.08%	6%	5.4%	7.4%	8.1%	9.4%	12%	12.7%
Operating Efficiency								
Funding Expense Ratio	7.62%	6.76%	7.61%	6.82%	6.05%	5.49%	5.08%	4.62%
Operating Expense Ratio	11%	10.1%	10.9%	10.8%	10%	9.3%	8.5%	7.9%
Cost-to-Income	57.2%	60.6%	57.5%	50.2%	51.6%	48.9%	46.1%	43.5%
Gross Loans to Deposits	95.26%	94.57%	88.82%	84%	85%	86%	87%	88%
Profitability Ratios								
Yield on Loan Portfolio	13.7%	12.2%	12.7%	13%	12%	11%	11%	10%
Net Interest Margin (NIM)	6.11%	5.48%	7.61%	6.82%	6.05%	5.49%	5.08%	4.62%
Yield on Interest-Earning Assets	9.43%	8.54%	10.94%	10.84%	10.01%	9.27%	8.54%	7.92%
Return on Assets (ROA)	1.87%	1.54%	2.05%	1.8%	1.8%	1.7%	1.7%	1.6%
Return on Equity (ROE)	13.2%	10.9%	13.7%	13.0%	15.5%	17.1%	20.1%	24.2%
Dividend Payout Ratio	13.83%	10.88%	6.97%	35%	35%	40%	40%	40%
Asset Quality Ratios								
CASA Ratio	52.62%	55.96%	55.12%	57.44%	59.45%	61.53%	63.68%	65.91%

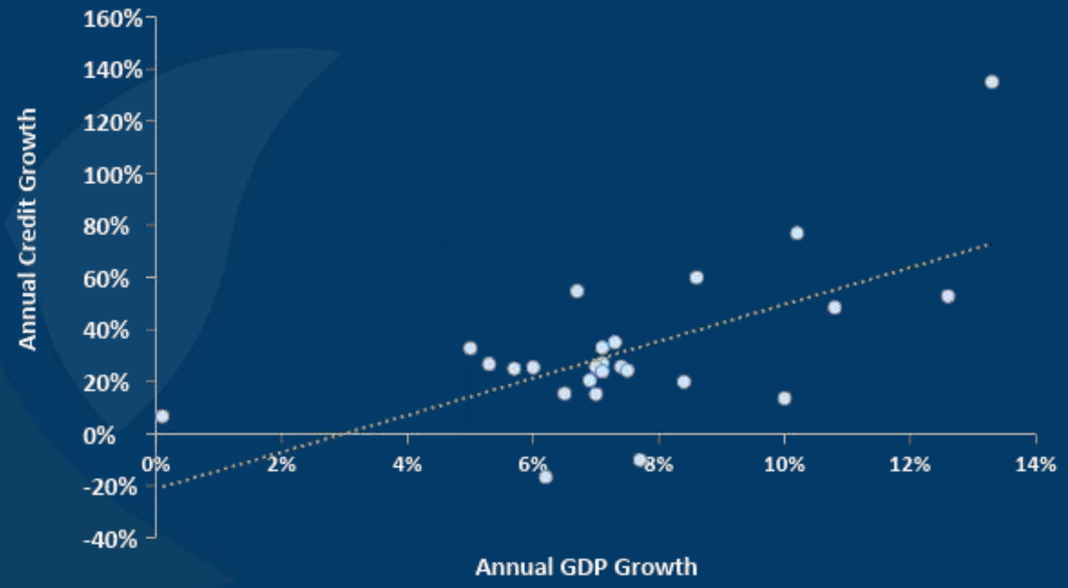
APPENDIX D : FINANCIALS

APPENDIX D-6: LOAN FORECAST REGRESSION ANALYSIS

Gross loan was forecasted based on a linear regression model between annual GDP growth and credit growth. Based on the model, the credit growth rate was projected using GDP growth rate forecasted based ADB and World Bank estimates.

$$Y_i = \alpha + \beta x + \mu_i$$

Y_i = annual credit growth
x = annual GDP growth
u_i = error term
α = estimated constant
β = estimated coefficients



ANOVA					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.812822248	0.812822248	14.60155871	0.0008761
Residual	23	1.280336714	0.055666814		
Total	24	2.093158962			
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*
Intercept	-0.211777555	0.146736478	-1.443250904	0.162432588	-0.515325087
GDP	7.079007398	1.852562022	3.821198596	0.0008761	3.246690872

REGRESSION STATISTICS	
Multiple R	0.623155863
R Square	**0.388323229**
Adjusted R Square	0.361728587
Standard Error	0.235938156
Observations	25

APPENDIX D : FINANCIALS

APPENDIX D-6: LOAN FORECAST REGRESSION ANALYSIS

To calculate the loan:

- First, we use the estimations from the model to calculate the credit growth using the forecasted GDP growth.
- Then calculate the total credit increase by multiplying previous year credit increase by the growth rate.
- Finally, to calculate the share of the credit growth to ABC, we multiply the total credit increase by ABC's credit market share.

LOAN FORECAST						
	2019A	2020F	2021F	2022F	2023F	2024F
Regression Credit Growth %	27%	-49.5%	20.6%	61.6%	52.9%	45.9%
Credit Growth	22,057,644	10,984,335	13,245,832	21,411,441	32,746,541	47,764,251
Total Credit Cambodia	104,793,026	115,777,360	129,023,193	150,434,634	183,181,176	230,945,426
ABC Market Share in Cambodia (Credit)	15.1%	14.5%	14.0%	13.5%	14.0%	14.5%
ABC Total Gross loan	15,808,814	16,787,717	18,063,247	20,308,676	25,645,365	33,487,087
Yearly Growth (YoY)		6.19%	7.60%	12.43%	26.28%	30.58%

YEAR	FORECASTED GDP	ESTIMATED CREDIT GROWTH RATE	TOTAL CREDIT INCREASE
2020F	-4.00%	-49.5%	11,140,481
2021F	5.90%	20.6%	13,434,126
2022F	11.70%	61.6%	21,715,813
2023F	10.47%	52.9%	33,212,045
2024F	9.47%	45.9%	48,443,236

APPENDIX D : FINANCIALS

APPENDIX D-7: INTEREST LENDING AND INTEREST DEPOSIT RATES USING ARIMA MODEL

We performed ARIMA model, short for Autoregressive Integrated Moving Average Model on EViews to predict interest lending and interest deposit rates from 2020-2025. Using ARIMA model, you can forecast a time series using the series past values. An ARIMA model is characterized by 3 terms: p, d, q where: p is the order of the AR term, q is the order of the MA term. d is the number of differencing required to make the time series stationary

Thus, our sample size is the monthly data from 2013m1 to 2020m8. The first difference was applied to make the data stationary. A linear regression model is constructed including the specified number and type of terms. The forecasting equations are as following:

Interest lending rate: $dliu_t = c + \beta_1 liu_{t-1} + \theta_1 \varepsilon_{t-1} + \theta_2 \varepsilon_{t-1} + \propto \varepsilon_t + \varepsilon_t$ (1)

Interest deposit rate: $diu_t = c + \beta_1 diu_{t-1} + \beta_2 diu_{t-1} + \beta_3 diu_{t-1} + \beta_4 diu_{t-1} + \theta_1 \varepsilon_{t-1} + \propto \varepsilon_t + \varepsilon_t$ (2)

(1): $dliu_t = -0.05811 + 0.738554 liu_{t-1} - 1.655963 \varepsilon_{t-1} + 0.901129 \varepsilon_{t-1} + 0.233174 \varepsilon_t + \varepsilon_t$

(2): $diu_t = 2.361307 + 1.297432 diu_{t-1} - 0.132024 diu_{t-1} + 0.271848 diu_{t-1} - 0.449565 diu_{t-1} - 0.999998 \varepsilon_{t-1} + 0.008278 \varepsilon_t + \varepsilon_t$

Out-sample data are predicted using the model is converted from monthly interest rates into annual interest rates using the formula

$$r_A = \left(1 + \left(\frac{r_m}{0.12}\right)\right)^{12} - 1$$

r: interest rate
A: annual
m: monthly

USD	2020F	2021F	2022F	2023F	2024F	2025F
Interest Lending Rate	9.4536%	8.5407%	7.7914%	7.0468%	6.3069%	5.5717%
Interest Deposit Rate	2.3837%	2.3937%	2.4152%	2.4111%	2.3929%	2.3770%

APPENDIX E: VALUATION

APPENDIX E-1: DIVIDEND DISCOUNT MODEL

PRESENT VALUE OF DIVIDEND (KHR'Million)		2020F	2021F	2022F	2023F	2024F
Dividend		227,278	299,888	335,018	391,659	481,627
Discount Factor	11.4%	0.898	0.806	0.723	0.649	0.583
Present Value		**204,015**	**241,641**	**242,318**	**254,291**	**280,698**

DIVIDEND DISCOUNT MODEL	
Estimate Growth	4%
Terminal Year	3,943,728
Total Present Value	5,166,692
Number of Share	429
Intrinsic Value	**12,048.68**
Current Price	**16,860**
Downside Risk	**-29%**

APPENDIX E : VALUATION

APPENDIX E-2: RESIDUAL INCOME MODEL

RESIDUAL INCOME MODEL		2020F	2021F	2022F	2023F	2024F
Beginning BV per share (Bt-1)		9,165	9,960	10,815	11,770	12,683
Net income per share (EPS)		1,325	1,554	1,736	1,827	2,246
Dividend payout		40%	45%	45%	50%	50%
Less dividend (D)						
		530	699	781	913	1,123
Change in Retained Profit					913	1,123
		795	855	955		
Beginning BV per share (Bt-1)		9,165	9,926	10,818	12,683	13,806
Ending BV per share (Bt-1+EPS-D)		9,960	10,815	11,770	12,835	14,183
Net income per share (EPS)		1,325	1,554	1,736	1,827	2,246
Less per share equity charge (rBt-1)		1,045	1,136	1,190	1,295	1,395
Residual income (EPS - Equity charge)						**851**
		280	**418**	**546**	**532**	
Discount factor	11.4%	0.898	0.806	0.723	0.649	0.583
Present Value		**251**	**337**	**395**	**345**	**496**

RESIDUAL INCOME MODEL	
Terminal growth	4.00%
Terminal Year	4,525
Intrinsic value	**15,515**
Current Price	**16,860**
Downside risk	**-8.0%**

APPENDIX E : VALUATION

APPENDIX E-3: COST OF DEBT

COST OF DEBT OF ABC	
Current Rating (Based on S&P Global Rating)	**BB**
Default Spread (Based on Synthetic Rating)	3.50%
US Risk Free Rate (5 year T-bond)	0.37%
Cambodia Default Spread	6.46%
Cost of Debt	10.33%
Cost of Debt After Tax	**8%**

FIND MARKET VALUE OF DEBT						
(KHR'Million)		**1**	**2**	**3**	**4**	**5**
Interest Payment		240,079	240,079	240,079	240,079	240,079
Principal Repayment						2,869,918
Discount Factor	8%	0.924	0.853	0.788	0.728	0.672
Present Value of Debt		**221,753**	**204,826**	**189,191**	**174,750**	**2,090,930**

SYNTHETIC CREDIT RATING AND SPREAD		
Interest Coverage Ratio	Rating	Spread
> 12.5	AAA	0.75%
9.5 - 12.5	AA	1%
7.5 - 9.5	A+	1.5%
6 - 7.5	A	1.8%
4.5 - 6	A-	2%
3.5 - 4.5	BBB	2.25%
3 - 3.5	BB	3.5%
2.5 - 3	B+	4.75%
2 - 2.5	B	6.5%
1.5 - 2	B-	8%
1.25 - 1.5	CCC	10%
0.8 - 1.25	CC	11.5%
0.5 - 0.8	C	12.7%
< 0.5	D	14%

APPENDIX E : VALUATION

APPENDIX E-4: COST OF EQUITY

COST OF EQUITY OF ABC	
US Risk Free Rate (5 year T-bond)	0.37%
US Market Beta (Regional Bank)	0.43
ACLEDA Bank Equity Beta (Bottom up)	0.56
US ERP	5.23%
Cambodia CRP	8.09%
Cost of Equity	**11.4%**

MARKET VALUE (KHR'MILLION)	
Market Value of Equity	7,476,394
Market Value of Debt	2,881,451

Dividend Forecast	KHR' Million
2020 F	227,278
2021 F	299,888
2022 F	335,018
2023 F	391,659
2024 F	481,627

APPENDIX E : VALUATION

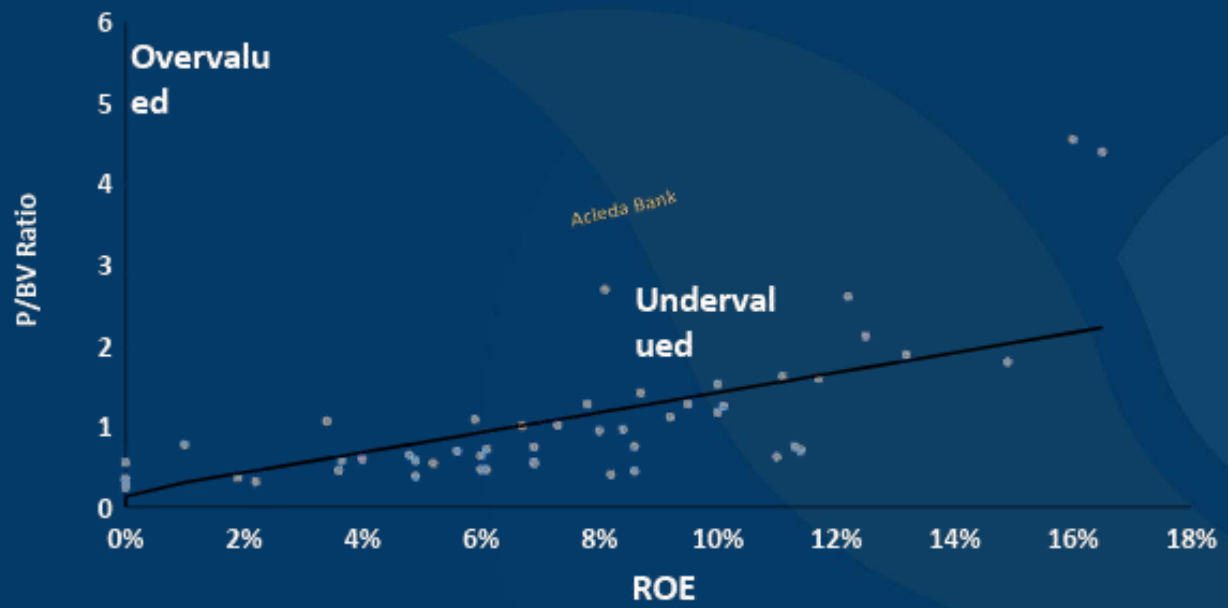
APPENDIX E-5: SENSITIVITY ANALYSIS

DDM		COST OF EQUITY						
		8.4%	9.4%	10.4%	11.4%	11.4%	12.4%	13.4%
Terminal Growth	5.5%	30,408	22,408	17,679	14,558	12,346	10,696	9,421
	5.0%	26,283	20,123	16,251	13,593	11,657	10,185	9,029
	4.5%	23,216	18,305	15,064	12,767	11,055	9,730	8,676
	4.0%	20,846	16,823	14,063	**12,049**	10,525	9,325	8,358
	3.5%	18,960	15,593	13,207	11,429	10,054	8,960	8,069
	3.0%	17,422	14,555	12,466	10,879	9,633	8,630	7,805
	2.5%	16,146	13,667	11,820	10,392	9,255	8,330	7,563

RIM		COST OF EQUITY						
		8.4%	9.4%	10.4%	11.4%	11.4%	12.4%	13.4%
Terminal Growth	5.5%	17,709	16,883	16,185	15,582	15,049	14,571	14,138
	5.0%	17,679	16,857	16,162	15,560	15,029	14,553	14,120
	4.5%	17,650	16,831	16,138	15,538	15,009	14,534	14,103
	4.0%	17,620	16,804	16,114	**15,515**	14,989	14,516	14,086
	3.5%	17,591	16,778	16,090	15,494	14,969	14,497	14,069
	3.0%	17,561	16,751	16,066	15,473	14,949	14,479	14,051
	2.5%	17,531	16,725	16,042	15,451	14,929	14,460	14,034

APPENDIX E : VALUATION

APPENDIX E-6: RELATIVE VALUATION REGRESSION ANALYSIS



$$\frac{Po}{BVo} = \frac{ROE - g}{Ke - g}$$

REGRESSION STATISTICS	
Multiple R	0.653656889
R Square	0.427267329
Adjusted R Square	0.415578907
Standard Error	0.683666522
Observations	51

ANOVA						
	df	*SS*	*MS*	*F*	*Significance F*	
Regression	1	17.0856866	17.08569	36.55475	1.99E-07	
Residual	49	22.9025958	0.4674			
Total	50	39.9882824				
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.178149998	0.17438509	1.02159	0.311993	-0.17229	0.52859
GDP	12.34952685	2.04257689	6.046052	1.99E-07	8.244815	16.45424

APPENDIX E : VALUATION

APPENDIX E-7:RELATIVE VALUATION PEERS COMPARISON TABLE

Banks	Country	MRT CAP (USD MN)	P/BV Ratio (x)	P/E Ratio (x)	ROA	ROE	Beta	Dividend Yield	Non Interest Ratio	NIM	NPL Ratio
Bank Negara Indonesia	Indonesia	7,748	1.00	14.2	0.9%	6.7%	1.45	3.5%	27%	4.6%	2.3%
Hong Leong Bank	Malaysia	8,945	1.27	13.9	1.2%	9.5%	1.12	2.1%	37%	1.8%	0.6%
CIMB	Malaysia	8,753	1.52	13.5	0.5%	4.8%	1.10	3.3%	38%	2.1%	3.1%
RHB Bank	Malaysia	4,892	0.75	12.3	0.9%	8.6%	1.06	3.7%	46%	1.6%	2.0%
Maybank	Malaysia	22,332	1.11	9.1	0.9%	9.2%	0.88	4.8%	53%	1.6%	2.7%
Bank of the Philippine Islands	Philippines	8,278	1.41	16.7	1.1%	8.7%	0.99	2.0%	29%	3.9%	1.7%
Metropolitan Bank and Trust Company	Philippines	4,600	0.69	14	0.7%	5.6%	0.94	2.0%	22%	4.5%	1.3%
Bangkok Bank	Thailand	7,786	1.55	10.4	0.6%	5.2%	1.10	4.1%	45%	2.2%	3.4%
Krung Thai Bank	Thailand	5,169	1.50	7.6	0.7%	6.1%	1.01	6.7%	32%	3.1%	4.3%
TMB Bank	Thailand	3,683	3.00	9.9	0.8%	6.9%	1.28	0.9%	28%	3.4%	2.4%
OCBC Bank	Singapore	33,392	6.01	11.9	0.7%	8.0%	1.03	4.4%	31%	1.8%	1.5%
Bank for Investment and Development of Vietnam	Vietnam	7,136	2.11	19.3	0.6%	12.5%	1.22	1.7%	34%	2.5%	1.5%
Regional average			**1.83**	**12.73**	**0.8%**	**7.7%**	**1.10**	**3.3%**	**35%**	**2.8%**	**2.2%**
ANZ Bank	Australia	50,372	1.08	17.9	0.4%	5.9%	1.18	2.6%	19%	1.8%	0.3%
National Bank of Canada	Canada	18,817	1.79	11.7	0.7%	14.9%	1.15	4.0%	46%	2.1%	0.5%
China Construction Bank	China	192,764	0.75	6.9	0.9%	11.3%	0.75	4.8%	28%	2.3%	1.4%
Deutsche Bank	Germany	22,810	0.35	0.0	-0.1%	-2.5%	1.18	0.0%	48%	1.7%	1.7%
ICICI Bank	India	47,882	2.69	34.5	0.7%	8.1%	1.48	0.0%	61%	3.3%	6.1%
Sumitomo Mitsui Financial Group	Japan	41,545	0.38	8.0	0.2%	4.9%	1.10	6.0%	59%	1.0%	0.8%
United Overseas Bank	Singapore	28,611	0.96	12	0.8%	8.4%	1.11	4.1%	34%	1.8%	1.5%
Shinhan Financial Group	South Korea	15,726	0.4	4.9	0.6%	8.2%	1.07	5.5%	53%	1.9%	0.3%
International average			**1.05**	**11.99**	**0.5%**	**7.4%**	**1.13**	**3.4%**	**44%**	**2.0%**	**1.6%**
Overall average			**1.52**	**12.44**	**0.7%**	**7.6%**	**1.11**	**3.3%**	**39%**	**2.4%**	**2.0%**
Acleda Bank Plc	Cambodia	1,825	1.88	14.40							
Implied Price			**13,931**	**14,567**							
Current price (08/01/2021)			**16,860**	**16,860**							
Premium/ Overpriced			**21%**	**16%**							

APPENDIX E : VALUATION

APPENDIX E-8: TERMINAL GROWTH RATE

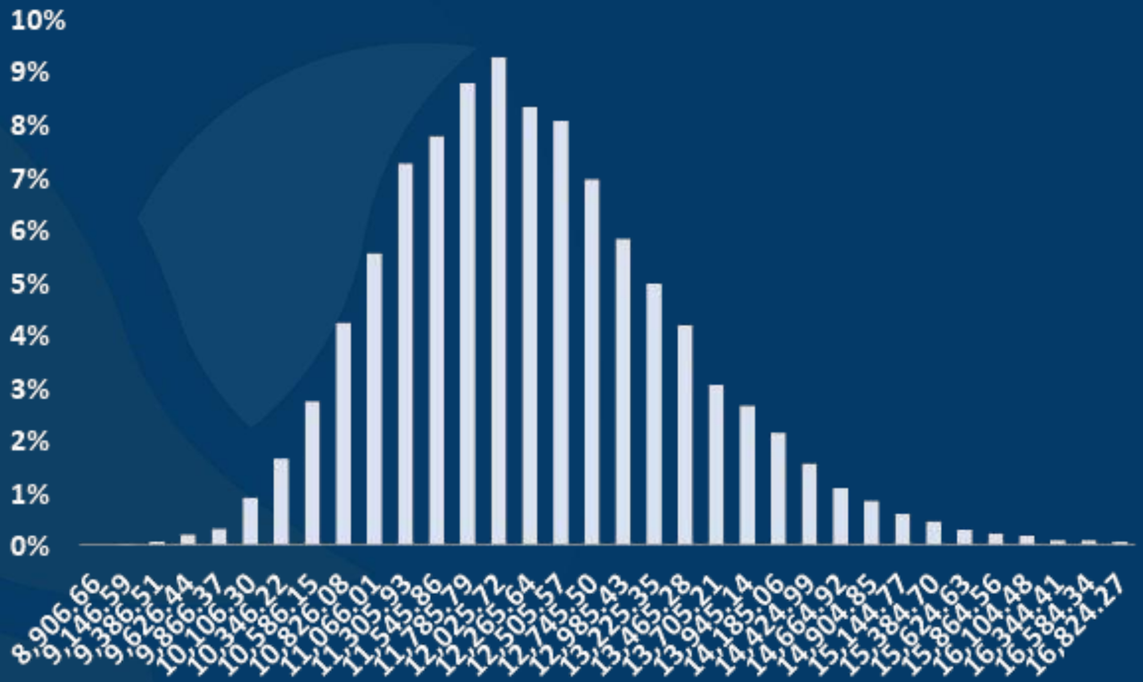
Terminal Growth Rate		
		Weighting
Average GDP Growth Rate	6.7%	30%
Long Run US Average Inflation rate	1.2%	30%
Cambodian Population Growth Forecast	1.4%	30%
Cambodian Banking Industry Growth	10%	10%
Terminal growth rate	**4%**	

APPENDIX E : VALUATION

APPENDIX E-9: MONTE CARLO SIMULATION

KEY VARIABLES	MEAN	STANDARD DEVIATION	SIMULATION
Discount Factor	11.4%	0.50%	12.14%
Terminal growth	4%	0.50%	3.99%
Dividend payout (1st)	40%	0.50%	39.68%
Dividend payout (2nd)	45%	0.50%	44.94%
Dividend payout (3rd)	50%	0.50%	50.54%

Mean	12,186.80
Median	12,065.31
Standard Deviation	1,144.36
Max	21,142.96
Min	9,146.59
Coefficient of Variation	10.65
Target Price	12,048.68
Market Price	16,860
Probability	54.80%



Interpretation

With 10,000 trials, there is only 0.05% that the target price will reach the current market price of KHR 16,860.

APPENDIX F: REFERENCES

[1]Bopha, P. (08 September,2020). *Cambodia's Debt Trap: Taking Out New Loans to Pay Back Old Loans.* Retrieved from https://www.voacambodia.com/a/cambodia-s-debt-trap-taking-out-new-loans-to-pay-back-old-loans/5074618.html

[2]Radio Free Asia. (12 December, 2020). *Cambodian Bank Demands 'Action' Against NGOs Who Say Workers Need Debt Relief.* Retrieved from https://www.rfa.org/english/news/cambodia/bank-07022020141015.html#:~:text=12%2C%202019.&text=Cambodia's%20ACLEDA%20Bank%20accused%20three,jobs%20during%20the%20coronavirus%20pandemic

[5]World Bank. (May, 2020). *Cambodia Economic Update, Cambodia in the time of Covid-19.* Retrieved from http://pubdocs.worldbank.org/en/357291590674539831/pdf/CEU-Report-May2020-Final.pdf

[6]David, H. (27 February,2020). *Chinese exodus pinpricks Cambodia property bubble.* Retrieved from https://asiatimes.com/2020/02/chinese-exodus-pinpricks-cambodia-property-bubble/

[7]Chan, S. (9 April, 2020). *Agriculture needs to grow, says Premier.* Retrieved from https://www.khmertimeskh.com/711072/agriculture-needs-to-grow-says-premier/

[8]Niem, C. (11 May, 2020). *Loan restructuring sought.* Retrieved from https://www.phnompenhpost.com/national/loan-restructuring-sought

[9]National Institute of Statistics. (November,2018). *Cambodia Socio-Economic Survey 2017.* Retrieved from https://nis.gov.kh/nis/CSES/Final%20Report%20CSES%202017.pdf

[10]World Bank. (14 october, 2020). *Country Cambodia Overview.* Retrieved from https://www.worldbank.org/en/country/cambodia/overview

[11]European Commission. (2020). *Cambodia loses duty-free access to the EU market over human rights concerns.* https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1469?fbclid=IwAR1MNAbmb8U4b9q4qcxoJ-TsKHCZbSOP4Dc8FI3grmMS1LMSkQ3DPdrlAx4

ACLEDA Bank Annual Reports. (2015-2019). Retrieved from https://www.acledabank.com.kh/kh/eng/fi_auditedreport

Canadia Bank Annual Reports. (2015-2019). Retrieved from https://www.canadiabank.com.kh/about

Cambodian Public Bank. (2015-2019). Retrieved from Cambodian Public Bank. (2017). Retrieved from https://www.cpbebank.com/About-Us/Financial-Information/Past-Financials

Sathapana Bank plc. (2015-2019). Retrieved from https://www.sathapana.com.kh/about-sathapana/auditedfinancialreport/audited-financial-report/

Foreign Trade Bank of Cambodia. (2015-2019). Retrieved from https://ftbbank.com/en/about-ftb/

ACLEDA Disclosure Documents. (2020). Retrieved from https://www.acledabank.com.kh/kh/eng/listing

APPENDIX F: REFERENCES

ACLEDA Environmental and Social Sustainability Reports. (2020). Retrieved from https://www.acledabank.com.kh/kh/eng/bp_sustainabilityreport?fbclid=IwAR2annCNdJX94Id0DSrvHusosZfah5UKEIZ1SMxC7JgL-oSuUgwNONwSeZw

National Bank of Cambodia. (2011). *Laws and Regulations Applicable to Banks and Financial Institutions.* Retrieved from https://www.nbc.org.kh/download_files/legislation/banking_code_2011.pdf

London Stock Exchange Group. (2019). *ESG Disclosure Score.* Retrieved from https://www2.lseg.com/sustainablefinance/ESGdisclosure-assessment

Cambodia Securities Exchange (CSX) http://csx.com.kh/jsp/data/lstcom_view.jsp?MNCD=5010&issueCode=KH1000100003

National Bank of Cambodia. (2019). *Annual supervision Report 2019.* Retrieved from https://www.nbc.org.kh/download_files/supervision/sup_an_rep_eng/Annual_Report_2019_English_Final.pdf

S&P Global. (April, 2020). *For Asia-Pacific Banks, COVID-19 Crisis Could Add US$300 Billion To Credit Costs.* Retrieved from https://www.spglobal.com/ratings/en/research/articles/200406-for-asia-pacific-banks-COVID-19-crisis-could-add-us-300-billion-to-credit-costs-11359063

World Bank. (June, 2020). *The outlook for East Asia and Pacific in eight charts.* Retrieved from https://blogs.worldbank.org/eastasiapacific/outlook-east-asia-and-pacific-eight-charts-coronavirus-COVID19

S&P Global. (June, 2020). *Global Banking Country-By-Country Outlook Midyear 2020.* Retrieved from https://www.spglobal.com/_assets/images/ratings/pdf/global-banking-country-by-country-outlook-midyear-2020.pdf

National Bank of Cambodia. (2020). *Economic and Monetary Statistics 2020.* Retrieved from https://www.nbc.org.kh/download_files/publication/eco_mon_sta_eng/Review%20320%20Jun-2020-En.pdf

Bunthoeun, C. (25 March, 2020). *Riel Money in Digital Era.* Retrieved from https://www.khmertimeskh.com/705458/riel-money-in-the-digital-era/#:~:text=The%20total%20size%20of%20the,accounting%20for%20112.5%20trillion%20riel.

ACLEDA Securities Plc. (October, 2020). *Weekly Business News.* Retrieved from http://www.acledasecurities.com.kh/as/assets/investment_research/Investment_Research_Weekly_News-October%2028,%202020.pdf

Business2Business. (7 April, 2020). *SME Bank of Cambodia: SME Co-Financing Scheme.* Retrieved from https://www.b2b-cambodia.com/news/sme-bank-of-cambodia-sme-co-financing-scheme/