DR. STRAUSS & PARTNERS MANAGEMENT CONSULTING

Banks in Bulgaria – Sector review 2024

Study excerpt – key results and interesting findings

Comprehensive analysis of 15 BG banks – highlights, key trends & challenges, and benchmark findings

August 2024

DR. STRAUSS & PARTNERS
management consulting

Agenda

I. **Benchmarking results and contextualization**

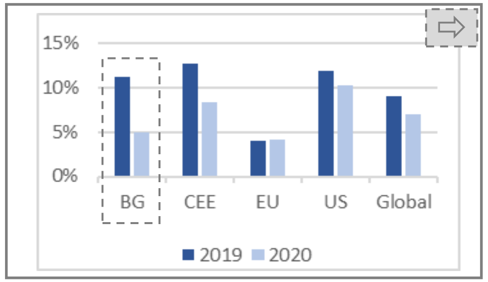
II. Profit and efficiency KPIs

III. Key challenges and response options of Bulgarian banks

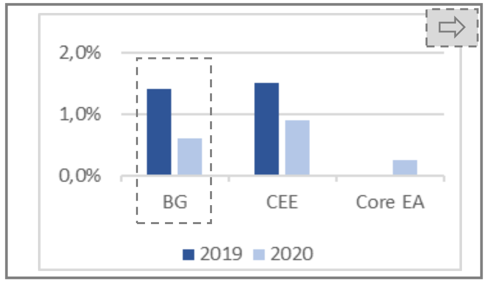
Bulgarian banking sector in a broader context (Global / EU / CEE)

Banking Sector: Profitability, Efficiency, and Risk

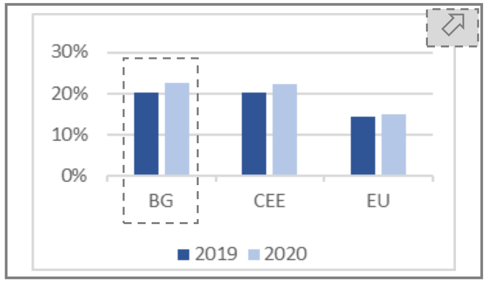
Return on Equity (RoE)



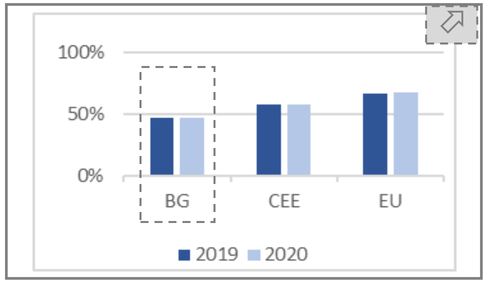
Return on Assets (RoA)



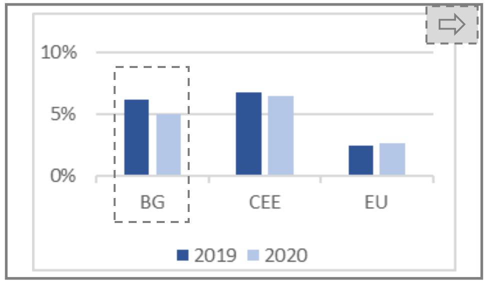
Capital Adequacy Ratio (CAR)



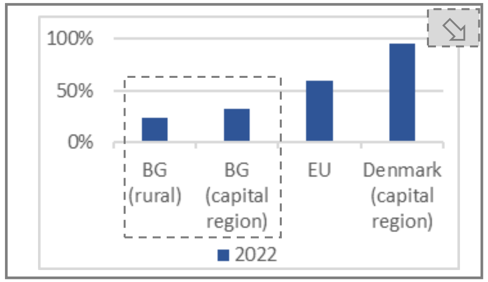
Cost/Income-Ratio (CIR)



Non-Performing loans (NPL)

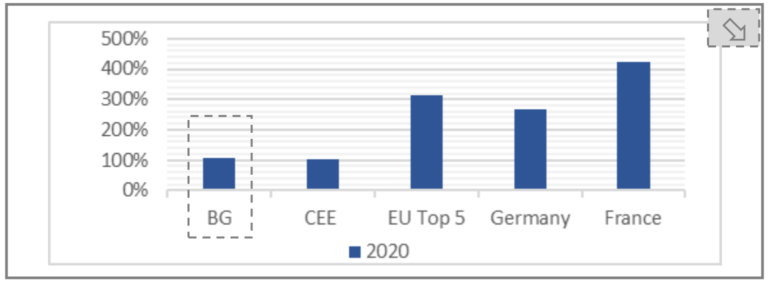


Online Banking penetration

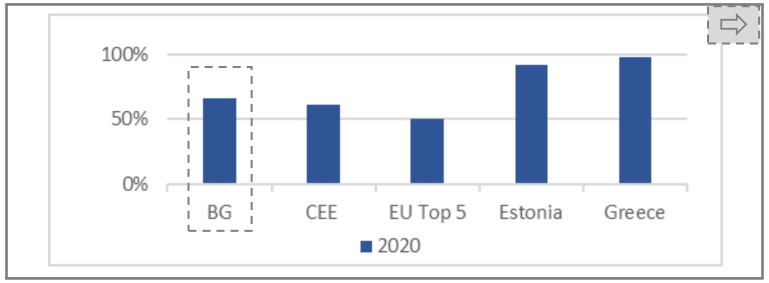


Banking sector: Concentration measures

Size of Banking Sector (Assets / GDP)



Top 5 Banks concentration (assets / all assets)



- BG banking system **generally in good shape** compared to EU, CEE and global competition (based on 2019 / 2020 data – assuming stable relations over time)
- **Mixed profitability results**: slightly below average (CCE), yet better than EU & US; **overall good capital strength**, and **more efficient** than competitors
- However, **Bulgarian banking sector shows some significant variances** the different players

- **Size of BG banking sector in lower third** – leaves room for growth in line with GDP as key driver
- **BG banking sector moderately concentrated** in comparison (2020: top 5 banks: 66% of assets) – also leaves room for further concentration

Sources: Deloitte, KPMG, McKinsey; own calculations

BG banks in comparison: similar better worse

Sector review ("Benchmarking") result: Ranking of Bulgarian banks

Ranking								
Fastest Growth		**Highest Profitability**		**Highest Efficiency**				
Asset growth	Net profit growth	Avg. Net Profit Margin	Avg. Return on avg. Assets	CIR	Avg. Ratio Ops Exp. / Total Assets	Avg. Rating (1 = top)	**Ranking** (1 = top)	**Banks**
4	8	2	2	2	6	4,0	1	DSK
6	4	3	6	3	4	4,3	2	BACB
11	11	$\boxed{1}$	4	$\boxed{1}$	$\boxed{1}$	4,8	3	UniCredit
9	6	4	9	5	2	5,8	4	Intl Ass Bank
3	12	8	5	4	7	6,5	5	Postbank
2	7	7	13	8	3	6,7	6	UBB
7	$\boxed{1}$	9	3	7	13	6,7	6	D Commerce
$\boxed{1}$	5	14	$\boxed{1}$	9	15	7,5	8	TBI
5	10	5	7	12	10	8,2	9	ProCredit
14	13	6	8	10	5	9,3	10	Allianz
12	-	10	10	11	8	10,2	11	Investbank
10	3	11	14	14	11	10,5	12	Municipal
15	14	13	11	6	9	11,3	13	FI
8	2	15	15	15	14	11,5	14	Texim
13	9	12	12	13	12	11,8	15	CCB

Key findings

- 4 of 5 largest banks in Top 6 – underpinning obvious strengths through size, client focus, internationality, and ownership factors
- DSK and BACB never top a single ranking but very good overall classification (1 & 2)
- UniCredit with 3 and "challenger" bank TBI with 2 "best-in class" rankings
- Small and medium sized banks with focus on corporate business find themselves in lower tiers of ranking
- Low growth (asset & profits) can be seen as one of the key drivers for lower rankings
- Up to 2 lower rankings can be overcompensated by other rankings being top notch

Comprehensive metrics & stable results: Using a long duration (2016-2023: 7 years) and applying long-term averages with averaged data to smoothen indicators supports **solid and meaningful results**

Note: Following banks have different calculation periods due to availability of annual report figures: ProCredit 2019-2023, TBI 2018-2023, Texim 2018-2023. In case of averages, calculation periods are reduced by another year. This might have an effect on the calculated (average) rates and growth rates and needs to be taken into consideration in evaluating the results.

$\boxed{}$ Best-in class

BG Banks: Comparison of long-term rankings and biggest movers

Biggest movers (at least by 2 ranks; net)

2016-2022

Ranking (1 = top)	**Banks**
1	DSK
2	UniCredit
2	BACB
4	Postbank
4	TBI
6	BG Dev Bank
7	ProCredit
8	UBB
9	Investbank
10	D Commerce
11	Intl Ass Bank
12	Allianz
13	FI
14	Texim
15	CCB
16	Municipal
17	Tokuda

2016-2023

Ranking (1 = top)	**Banks**
1	DSK
2	BACB
3	UniCredit
4	Intl Ass Bank
5	Postbank
6	UBB
6	D Commerce
8	TBI
9	ProCredit
10	Allianz
11	Investbank
12	Municipal
13	FI
14	Texim
15	CCB

Very favorable economic and interest-rate scenario had two-fold impact on various banks – for the better as well as for the worse**:**

- Top performers 2016-22 generally kept top spots
- 3 mid-size universal banks (D Comm, Intern. Ass. Bank, Municipal) increased positions – reasons being:
  - D Commerce: Combination of huge increase of return on asset (interest rate increase), coupled with cost discipline
  - IAB: Net profit growth & margin significantly increased coupled with CIR reduction
  - Municipal: Lost net profit growth momentum but increased in all other KPIs (growth, profit, and efficiency)
- 3 mid-sized banks lost ground – partially significantly:
  - ProCredit (-2 ranks): Efficiency decrease due to high costs overcom-pensates (still) very strong profit and growth elements
  - Investbank (-3 ranks): Very strong asset growth & good cost discipline; profit element not a factor for increased ranking
  - TBI (-3 ranks): Cost increase overproportional vs. growth and especially revenue: efficiency issues combined with plateauing revenue increase drags numbers and ranking down

Note: Tokuda (as acquisition by BACB announced in 2024) and BDB (as significantly different and thus almost incomparable business model) have been taken out of benchmarking, thus reducing number of analyzed banks from 17 to 15

Business elements & ranking: Is there a "winning formula"?

Rank	Name	Tercile	Business characteristics					
			Size[1] (Assets)	Growth metrics	Bank type	Client focus[2]	Owner-ship	Specialty / other
1	DSK	Top	Super large		Universal	Retail	Foreign	
2	BACB	Top	Medium		Universal			
3	UniCredit	Top	Super large		Universal		Foreign	
4	IAB	Top	Medium		Universal			
5	Postbank	Top	Large	Acquis.	Universal	Retail	Foreign	
6	UBB	Middle	Super large	Acquis.	Universal	Retail	Foreign	
7	D Comm	Middle	Medium		Universal			
8	TBI	Middle	Medium		Universal	Retail	Foreign	Challenger[3]
9	ProCredit	Middle	Medium		SME		Foreign	
10	Allianz	Middle	Medium		Universal	Retail	Foreign	
11	Investb.	Low	Medium		Universal			
12	Municipal	Low	Medium		Universal			
13	FI	Low	Large		Universal			
14	Texim	Low	Small		Universal			
15	CCB	Low	Large		Universal	Retail		

Business charact.	Hypotheses (potential explanations) for ranking results
Size (Assets)	(+) Economies of scale by distributing fixed costs by larger base
	(+) Better distribution of revenues streams and/or portfolio risks
	(+) Broader & deeper offering for more & different client groups
	(-) Higher complexity and alignment effort, potentially higher costs
Growth metrics	(+) Additional inorganic growth via acquisitions support positive size effects – if integration is properly managed and executed
Bank type	(+) Universal: Large offering for wide variety of clients (Retail, SME, large corporates; potentially public clients); able to serve vast amount of client needs and thus ability to attract new customers
	(-) Universal: Potential reduction in focus and ability to concentrate on relevant, profitable products & services
	(+) Niche: Capitalize on focused business model and apply strengths to selected clients / offering in order to provide superior services, delivering higher margins
Client focus	(+) Wider focus supports (revenue & risk) diversification
	(+) More narrow, "niche" might support capitalization on potential higher margin business (e.g. interest margins: retail > corporate)
Owner-ship	(+) Potential benefits from ties to large, international groups in terms of capital, network, knowledge, systems, risk approach etc
	(-) Potential drawback from local ownership in terms of capital supply knowledge and potential networks; better market insights
Specialty / other	(+) "Challenger": Approach of rethinking banking business model; applying "green-field"-type approach; clear focus on strengths
	(+) Development Bank: Focus on specific business model (clients, offering) in order to apply USP and benefits from market metrics

Key findings

- **Mixed results** regarding key elements of BG banks
- **Top cluster** largely comprised of **(super) large**, retail-focused, foreign-owned banks
- Medium cluster mostly medium-sized, universal banks, corporate-client focus
- Third cluster mostly smaller, corporate-focused banks
- As vast majority of players are "universal" banks; differentiation power of this attribute rather limited

➔ Elements of **a "winning formula"** seem to be:
- large size (incl. inorganic growth)
- large part of retail clients

- **2022 –> 2023: Foreign ownership & niche approach seem to be less of a positive force**

1 Size brackets: Super large (> 20bn), Large (5-20bn), Medium (1.5-5bn), small (< 1.5bn)

2 based on share of retail resp. individual loans (as of 2023)

3 Bank's self-description

The offering: Many similar products .... and some “white spots”

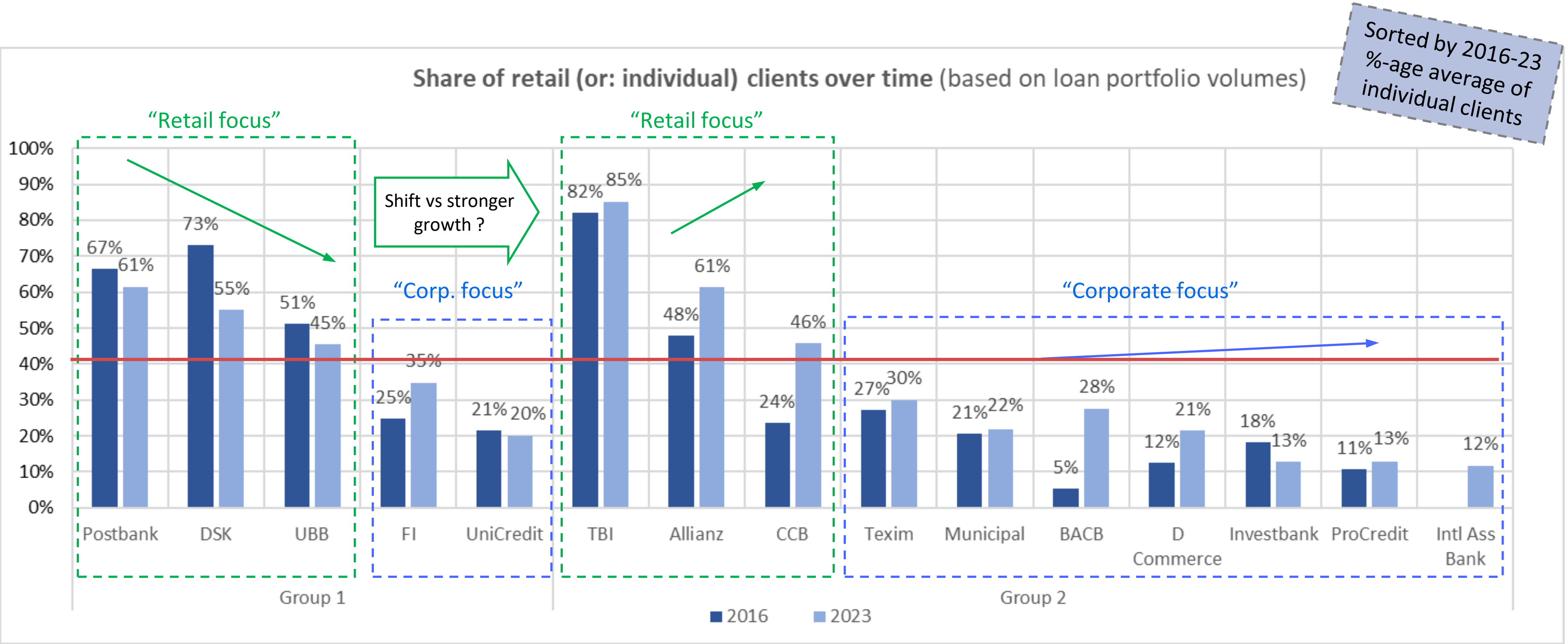
Based on comprehensive internet (website) screening (Q1 2024)

	Individual Clients	Corporate Clients (all types)
Large Banks (BNB Gr. 1)	• **Fully-fledged** products & services (P&S) **offering** • **Covering**: Banking (online/mobile), Accounts, Savings & Deposits, Cards, Payments, Loans, Mortgages; selective additional services	• **Generally also fully-fledged** offering (at least 3/5 banks) for standard wholesale needs • Covers almost all P&S as for retail sector[1], however, **breadth & depth of financing solutions is even higher** in comparison
Smaller Banks (BNB Gr. 2)	• **Comprehensive offering**, yet generally less extensive in breadth & depth, esp. in mort-gages (exception: avg. no. of savings acc.) • **Services for affluent clients** almost completely **missing** (Private Banking, Funds, Advisory…)	• **Comprehensive offering**, yet again less broad & deep compared to large banks • **Focus more on standard, local financing** (less external / trade finance), lesser EU-programs
“Challen-ger” (TBI)	• Very reduced offering in terms of number of products; however, products with numerous features & benefits	
	• Retail banking with huge variety of P&S • On average across all banks: 5 accounts, 4,5 packages, 1,7 savings acc., 5,8 term deposits, 8 consumer loans, and 6,6 mortgages (!)	• Wholesale offering also very comprehensive, yet with larger differences between bank groups and products • Various services only provided by large banks

- **Clear offering differentiation missing** between large universal banks as well as large and (larger player of) smaller banks – **potentially more focus on specific USP** could increase visibility
- **Sheer amount of different products** (e.g. for retail: loans, mortgages, term deposits) **might rise complexity** and reduce willingness to purchase
- In retail banking, the **proliferation of** P&S focusing on affluent/wealthy clients such as **Private Banking, Asset & Fund Offering/Mgmt. is missing** – almost only offered by large banks
- Various corporate service only offered by (part) of the larger banks – **“white spots”** are services around **M&A, capital markets** (IPO; bond issues), and partly **EU programs**
- With a broad and deep offering comes a **very detailed – if not to say overly complex – pricing**

1 Except mortgages

Development of retail client share* - shift from larger to smaller banks ?



Findings

- All large banks with shrin-king retail share – except FI
- All Group 2 players` retail loan shares increased (except Investbank)
- All "corporate" focused banks with increasing retail share (except UniCredit)
- CCB with huge retail increase in 2023
- Long-term average retail share very stable at 41%, thus all "losses" seem to be compensated by "gains" – indicating a **structural client shift**

Structural shift: Potential reasons

Combination of **strategic decisions**, **market dynamics**, and **changing consumer preferences**

Large banks

- Strategic focus shift to concentrate more on corporate clients or other financial services
- Reevaluation of retail strategies, possibly due to increased competition or changing consumer behavior

Smaller Banks (Corporate-focused)

- Diversification strategy to mitigate risks and explore new revenue streams
- Adapted to meet increasing demand for retail banking services thus capturing market share

Smaller Banks (Retail-focused)

- Might have implemented effective marketing strategies / price measures to attract more retail clients
- More customer-centric approach, offering tailored products and services

* Retail clients ranked by loan share relative to total loans (not number of clients); threshold is retail client share in 2023 (41%)
Note: International Asset Bank not listed as data is missing

2023 average (almost similar to 2016-22 avg (41%))

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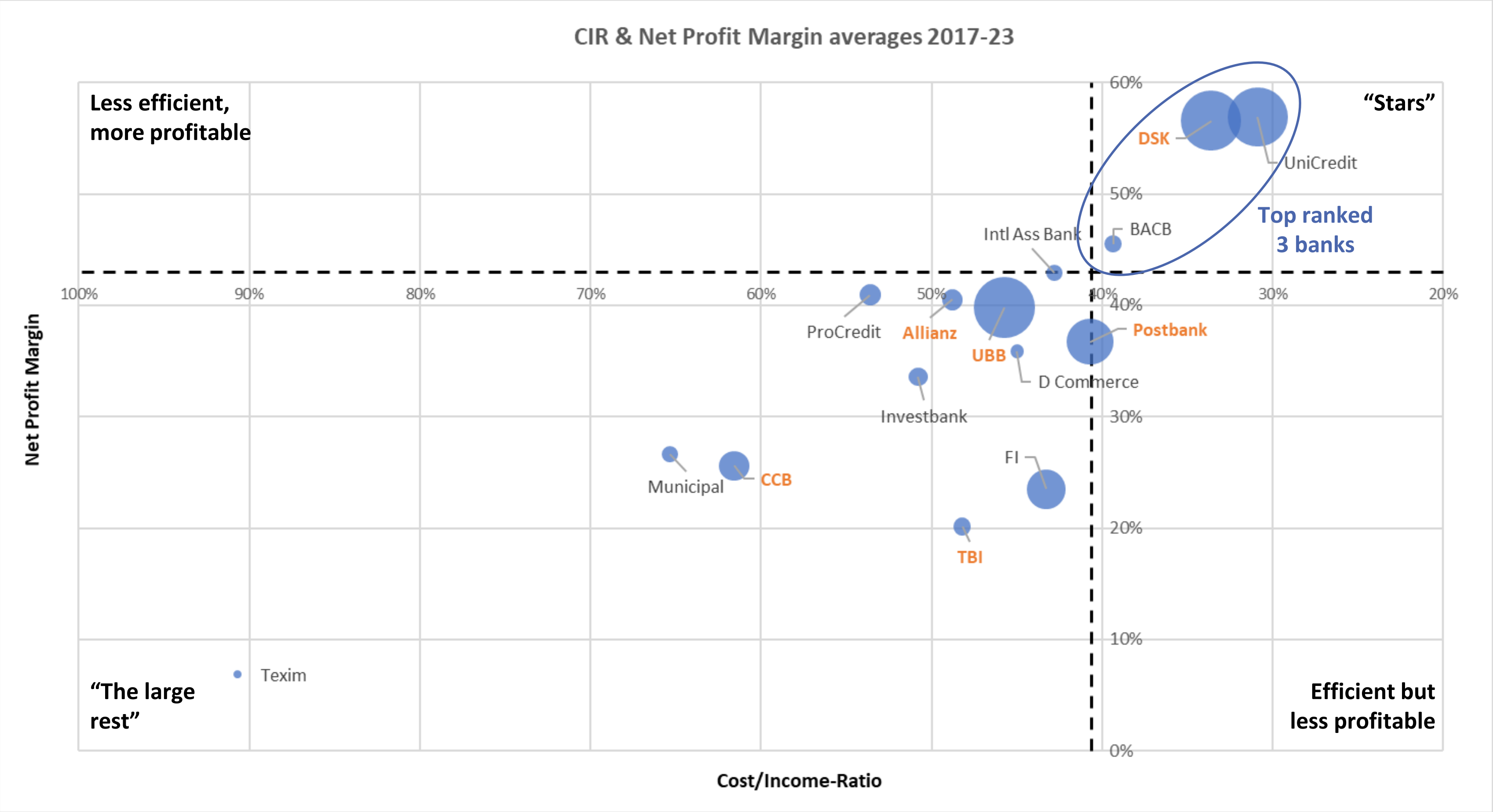
Net Profit Margin and Cost/Income-Ratio – interaction of key performance indicators for profitability & efficiency



Findings

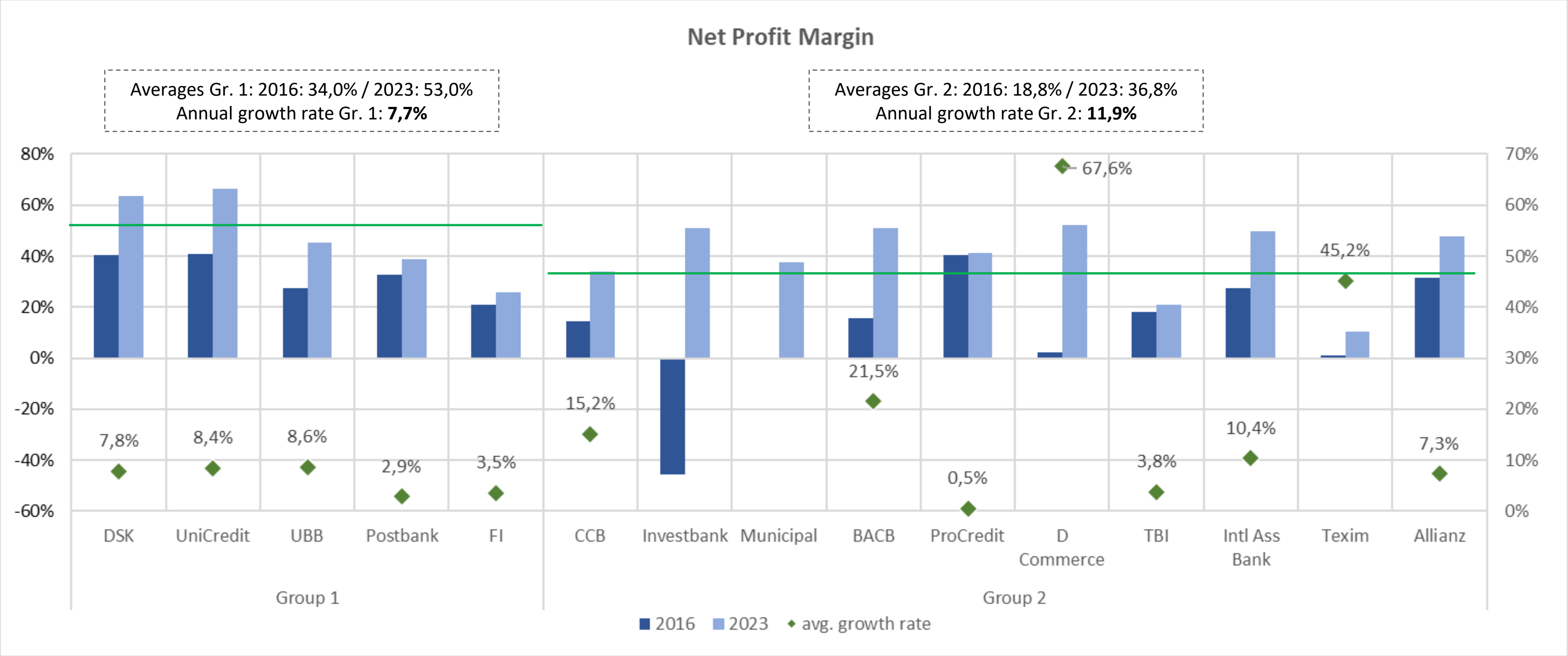
- Only DSK & UniCredit – 2nd and 3rd largest banks in terms of assets in 2023 – with top long-term average performance
- Performance of other 3 large banks below average numbers for CIR / NPM
- 3 banks with significant higher CIR than all others; the smallest of them also with very low NPM (Texim; CCB, Municipal)
- Medium-sized universal banks with corporate focus with comparable high CIR & low NPM – a "stuck in the middle" situation
- Challenger bank TBI with average CIR but comparable very low Net Profit Margin

Coloring indicates banks with "retail" focus (>40% share of retail loans in 2023)

Bubble size indicates size of total assets (2023)

Note: NPM for Investbank calculated based on 2017 figures as negative in 2016

Profit & Profitability insights: Net profit Margin



Findings

- Net profit margin is a key profitability indicator as is basis for several related KPI
- In general, larger banks with significantly higher margins, yet lower growth rates
- DSK & UC present outstanding 2023 figures
- 5 banks from Group 2 also with NPM > 50%
- All banks with rising NPM over time; ProCredit almost no growth (ops income and net profit "in sync")
- Compared to RoA & RoE, TBI shows "normal" margins

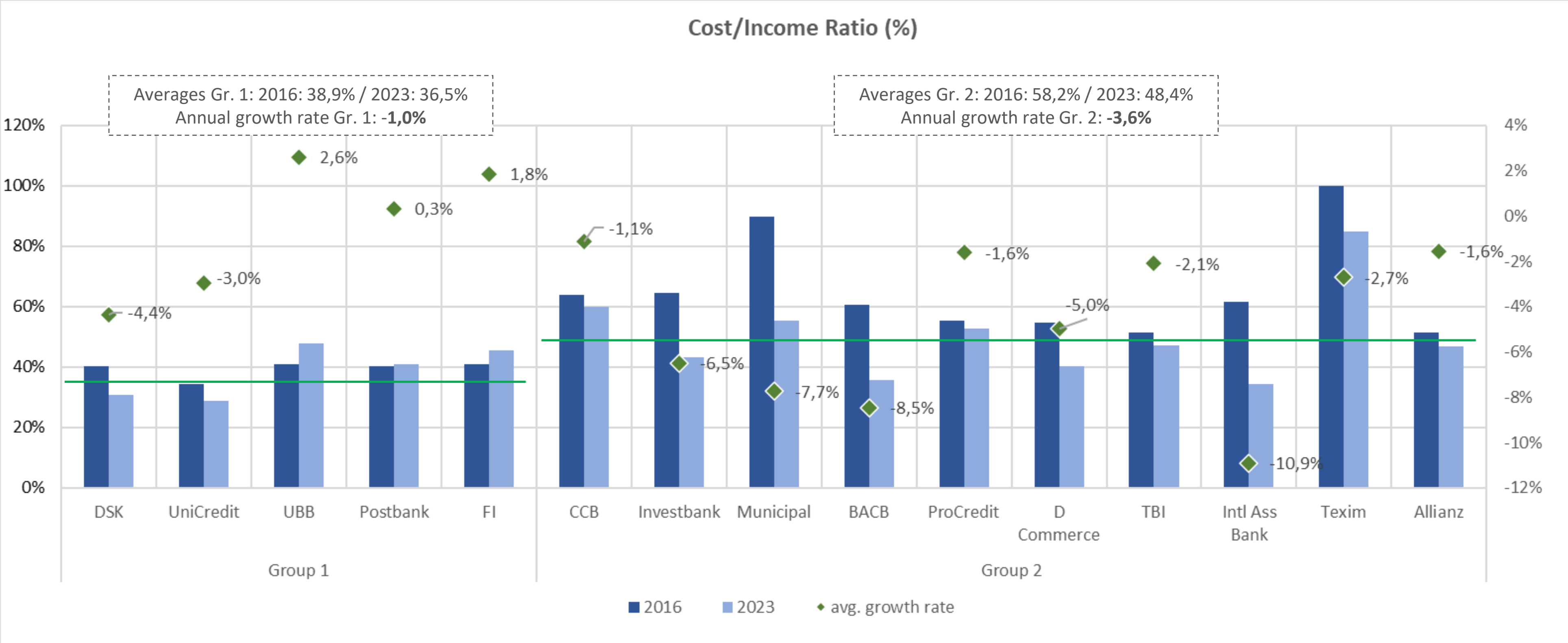
- Average profit margin for large banks at unprecedented 53%, for smaller ones at about 37 % - size, earnings power, and efficiency play their role
- Net Profit Margin (NPM) follows general analyzed trend: higher levels, yet reduced growth over time for larger banks; smaller ones showing opposite figures

indicates 2023 average

Net profit margin (NPM): Net profit / operating profit

Note: NPM growth rate capped at 60%. Municipal Bank at 182% not displayed. NPM for Investbank calculated based on 2017 figures as negative in 2016

Cost & Efficiency insights: Cost-Income-Ratio (CIR)



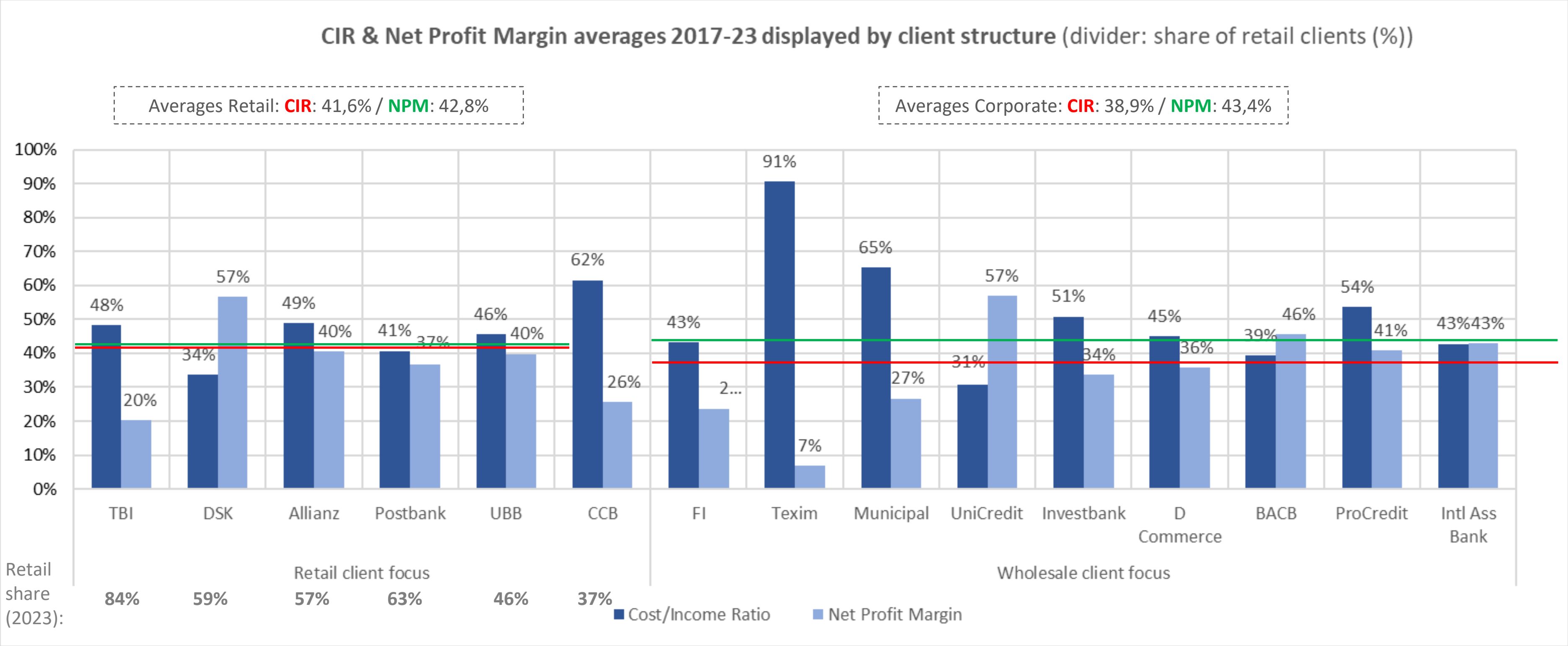
Findings

- Large banks saw minor decline in CIR over time (-1% p.a.), with DSK & UC leading
- However, other 3 large players with rising CIR
- Smaller banks could reduce CIR more – with 2023 levels still 12%-pp. higher than larger ones
- Among smaller banks, in tendency mid-size corporate-focused banks with highest levels (yet declining)
- IAB with strongest decline in CIR

- Cost/Income ratio sets operating expenses in relation to ops income – thus both sides can exert impact
- In comparison, the numbers can lead to the assumption that size supports efficiency in the sense, that costs can be distributed across a larger asset base – benefiting larger banks (if complexity is handled)
- Smaller bank generally more successful to decrease CIR

indicates 2023 average

Additional insights: Net Profit Margin and CIR based on client structure
(average 2016-2023)



Findings

- NPM > CIR for both groups (retail vs corporate) and overall average: very rare and very positive picture
- Retail banks with better CIR (- 2,7%-points) yet lower NPM (-0,6%-points)
- DSK, UC, and BACB only ones with NPM > CIR. Reasons are efficiency (UC), and profitability (DSK, BACB)
- Mid-sized, corporate-focused banks Texim and Municipal with worst “ratio”; also CCB with unfavorable ratio

- Client focus – by plain numbers – does not seem to have an explaining factor regarding efficiency (measured by CIR) and profitability (by NPM)
- Size, though, has differentiation potential: Five largest banks achieved average CIR of 37% / NPM of 53% - compared to 48% / 37% for smaller banks

— / — indicates 2023 average

Note: NPM for Investbank calculated based on 2017 figures as negative in 2016

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Key challenges & trends and response options of Bulgarian banks (I/II)

Excerpt; detailed options available

	Key challenge areas	Key challenges / trends	Response options (non-exhaustive)
Macro / Country	Economic environment / development	1. GDP growth mainly driven by consumers & exports 2. Elevated levels of Non-Performing Loans 3. Long-term contraction of banking margins & ROE 4. Lagging green transition in Bulgaria (lowest in EU) 5. Elevated economic convergence issue (Capital vs rest) 6. Geographic disparities & limitations in banking access	1. Support investments in company capital stock by offering favorable rates, ongoing advice & knowledge, tailored to client needs 2. Strengthen risk management, NPL reduction programs, debt restructuring 3. Embrace profitability's strongest lever ("Pricing“) to counter volume decreases 4. Strengthen focus & capabilities on green financing; optimize monitoring 5. Support with financing & advisory services; strengthen presence in rural areas 6. Improve access to funding in underdeveloped areas (embrace “new” approaches)
	Business environment	1. Unsupportive business environment 2. Challenging business demographics 3. Decline of market funding ratios for companies	1. Assist in leveraging government-supported programs 2. Provide financial advisory Enhancing quality & efficiency of SME services (as backbone of BG economy) 3. Facilitating access to alternative funding sources (VC, PE, IPO, Struct. Products etc)
	Demographics	1. Significant Labor Market Challenges: 1) Shrinking labor force & 2) Skill shortages 2. Shrinking client reservoir 3. (Private) pension provision	1. 1) Tap other / additional labor sources: Attract skilled migrants, 2) Improve specific adult education: Further strengthen banking skills-related adult education etc. 2. Expand geographic reach, widen untapped client base (expats, students, unbanked) 3. Collaborate to strengthen general system; increase in-house / 3rd party capabilities
	Society	1. Developing Middle Class 2. Changing Consumer Behavior 3. Increasing need for Social Impact	1. Provide innovate solutions & tailored offering (e.g. special packages, “Exec. & Entr.”) 2. Engage client analytics to understand behavior and better cater for client needs 3. Collaborate with e.g. NGOs, develop and promote sustainable finance initiatives
	ESG	1. Growing ESG considerations 2. Increasing need für Green Investments	1. Foster stronger alignment of banking practices with ESG principles (strategy, processes, systems, communication) 2. Support environmentally sustainable projects and improve relevant structures

Key challenges & trends and response options of Bulgarian banks (II/II)

Excerpt; detailed options available

	Key challenge areas	Key challenges / trends	Response options (non-exhaustive)
Micro / Banking	Technology (advances & digitalization)	1. Legacy systems & Digital Banking Infrastructure 2. Cybersecurity Risks 3. Fintech Disruption 4. Rise of blockchain technology & tokenization 5. Proliferation of generative AI	1. Collaborate with state-of-the art banking system providers; reduce technical debt 2. Cybersec. infrastructure, Employee Training/Awareness, Sec. Audits & Monitoring 3. Evaluate collaborations & with fintech firms (or M&A); upscale own tech stack 4. Generally explore BC Integration, Participate in alliances; explore tokenization cases 5. Selectively & gradually integrate AI; modular approach, begin with simple use cases
	Regulatory & Compliance	1. Frequency and speed of regulatory changes 2. Adherence to EU standards and evolving regulation 3. EURO adoption challenges 4. Basel III "endgame" considerations 5. Capability of "Green assets" attraction & monetization 6. (Politically driven) "skimming" of banking profits	1. Establish effective monitoring system, strengthen in-house capabilities 2. Prepare for foreseeable changes early on; evaluate impact and effort; collaborate 3. Holistically drive further preparations for EURO adoption in alignment with BNB 4. Start preparing for measures (focus on RWA, credit/market/ops risk) and liquidity 5. Evaluate alignments on in-house risk assessment models to comply with standards 6. Evaluate potential challenges (e.g. higher deposit interest, taxing of profits etc)
	Banking - Products & Services	1. Products & Services (mix, breadth & depth) 2. Huge & increasing number of products 3. Increasing demand for value add-services 4. Rise of cryptocurrencies	1. Foster concept of Niche-Banking / Decentralization; aim for "atomic" approach (1:1) 2. Streamline existing product shelf & variety after strict analysis to reduce costs etc. 3. Evaluate production & distribution of capital-light, value-add services (advisory etc.) 4. Evaluate integration of selected parts of value chain in offering (e.g. brokerage)
	Banking - Distribution / Sales	1. Complex distribution models 2. Large, partly underused branch network 3. Further personalization in (retail) banking 4. Optimized processes & client interaction 5. Increasing demand for "embedded finance" 6. Proliferation of Eco-systems	1. Overcome "silo approach": Further shift to more streamlined, seamless approach 2. Optimize intelligently, weighing costs vs opportunity (serve underbanked regions) 3. Further analyze and optimize branch network (incl. ATM, affiliates, other premises) 4. Leveraging innovative tech (AI, digital platforms) to streamline ops & enhance CX 5. Engage in partnerships to create EF opportunities (e.g., buy-now-pay-later apps) 6. Use marketplaces to serve clients with products outside immediate business models
	Banking - Competition	1. Proliferation of "Neo-Banks" & "Neo-Brokers" 2. Rise of "Digital Lending" 3. Pressure through Payment service providers (PSP)	1. Streamline own brokerage service by expanding counterparts, optimizing cost / fees 2. Evaluate fintech partnering; embrace agile, cost-effective lending process 3. Invest in innovative solutions, enhance digital banking experiences / ecosystems

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