

Overview of Banking

- More than 25 of years of experience in the banking sector:
 - 15 years in Investment Banking, covering equity research, capital markets and a bit of asset management within the private banking unit;
 - 10 years as Head of Finance & Planning in retail banking, dealing with complex planning, risk and finance frameworks. Closeness to the way regulation has been impacting banking management teams in recent years;
 - 3 years as Board Member of a resolved Bank (pre-liquidation status)
 - 2 years living in Madrid as CFO of the Spanish branch responsible for managing the sale of the business
- Currently enrolled in DBA in Management and Technology (Comillas, Madrid)
- BSc in Economics from Nova SBE; management programs
- Member of advisory boards of non-profit organizations.

- What is a Bank - what banks do to make money? **Guest Speaker: Tereza Cavaco,**
Digital Currencies, Bank of Portugal (10 Feb)
- Bank Strategy - what to do to create value? **Guest Speaker: Jon Fath**
Rauva CEO (24 Feb)
- Bank Risks - what can go wrong as we create value? **Guest Speakers:**
Inês Soares, *ESG Head, Novobanco*
Auzenda Pires, *Head of Credit Risk Models, Santander*
- Bank Crisis - what to do when things go really wrong?
- Bank Regulation - how can regulators try to prevent us from harming others? **Guest Speaker:**
Luis Costa Ferreira
Head of Supervision, Bank of Portugal
- Future of Banking - what can we do to continue creating value? **Guest Speaker: Tbc**
McKinsey or Bain (TBC, 5 May)

What I expect from you

- be interested and participative;
- prepare all cases, even the ones you will not present;
- in group reports, please be a group – do not just split the workload among the members; try to have an informed opinion on all that is written on your group report;

What I would like you to take from this course...

Understand why banks are different from other industries and can so potentially impact the wider economy

Read the news about banking and understand what is going on with sufficient critical reasoning

Understand a bit more what will be your day-to-day activity if you end up landing a job in banking

- **Exam => 50%**
 - ✓ **May 22 @ 8:30 (Thursday)**
 - ✓ **Format: Wiseflow / Closed book**
 - ✓ **100% of development questions focusing on commenting newsflow**
 - ✓ **At least one question focusing on guest speakers' sessions and selected case studies**
 - ✓ **At least one question pointing to key learnings from the course – personal opinions will be highly-valued**

Assessment

2023 Exam example

2. Don't fight the last war

The second lesson is that investors and regulators often miss these bigger structural flaws because they — like the proverbial generals — stay focused on the last war.

Take interest rate risks. These “flew under the supervisory system’s radar” in recent years, says Patrick Honohan, former central bank governor of Ireland; so much so that “the Fed’s recent bank stress tests used scenarios with little variation [and] none examined higher interest rates” — even amid a cycle of rising rates. Why? The events of 2008 left investors obsessively worried about credit risk, because of widespread mortgage defaults in that debacle. But interest rate risk was downplayed, probably because it had not caused problems since 1994.

Excerpt of section 2 – please read the section in full to answer the question.

Q1: (3.4 points)

Regulators were very quick to fully re-vamp the banking regulatory framework in the aftermath of the 2008-9 Great Financial Crisis. Yet March 2023 saw the demise of two banks (SVB and Credit Suisse) within a single week. Please elaborate comprehensively on the main changes brought about by Basel III and what may need to be revised after March.

Answer:

3. Safety is a state of mind

A third, associated, lesson is that items considered “safe” can be particularly dangerous because they seem easy to ignore. In the late 1990s, Japanese bankers told me that they made property loans because this seemed “safer” than corporate loans, because house prices always went up. Similarly, bankers at UBS, Citi and Merrill Lynch told me in 2008 that one reason why the dangers around repackaged subprime mortgage loans were ignored was that these instruments had supposedly safe triple-A credit ratings — so risk managers paid scant attention.

Excerpt of section 3 – please read the section in full to answer the question.

Q2: (3.4 points)

Describe the main asset and liability categories a Bank may hold on its balance sheet as well as the main risks associated to each category, along with the respective rationale. In addition to those, can you point out other types of risk related to banking activity? What are the main differences between retail and investment banks in this regard?

2024 Final averages

- Case studies: 17.2
- Exam: 14.4
- Final: 15.7

Q5: (3.4 points) Of the case studies discussed in class (which you have not prepared and/or challenged), which have you found most interesting and why?

Answer:

Q6: (3.0 points) Write a small essay on the main learnings you will be taking from the cases, guest speakers’ inputs and discussions in class.

Answer:

- **Group presentation of case studies => 35%**
 - ✓ Each group of 3-4 students is randomly assigned 2 cases
 - => one of the cases will have to be formally presented in class (**15 min max**, all members are invited to present) **20%**
 - => for the second case, group will be responsible for challenging the groups presenting the case **15%**
 - ✓ Presenting groups are expected to submit a report plus the presentation - to be submitted in Moodle until 1 hour before class
 - ✓ **Final grade to be released only after case + challenge rounds**

- **Class participation => 15%**
 - ✓ By default all students will get a grade in line with the exam's global average, the grade being improved according to the regularity/quality of intervention
 - ✓ IMPORTANT: this grade does not overlap with case studies' presentation.
 - ✓ **IMPORTANT: Final grade will not be revised upwards in case class participation averages down the result of exam + case studies' grades**

- ✓ **Two groups for each case study (two presenting, two challenging)**
 - ✓ Each case will be presented by two groups at the same time, each group answering non-overlapping questions (15 min * 2)
 - ✓ The challengers will have 10 min * 2 to put questions / debate
- ✓ **First Case study (ING) to be presented by professor on Feb 10**
- ✓ **Subsequent case studies to be allocated by grader once groups are formed**
- ✓ **Deadline to submit group composition: Feb 6**
- ✓ **Outputs to be submitted until 1 hour prior to class (= 14:00 pm)**

CORE

- **Choudry, Moorad** - *The Principles of Banking*, Wiley (2012)
- **Saunders and Cornett** - *Financial Institutions Management: a risk-management approach*, 9th ed, McGraw-Hill (2017)
- **European Central Bank / European Banking Authority** materials

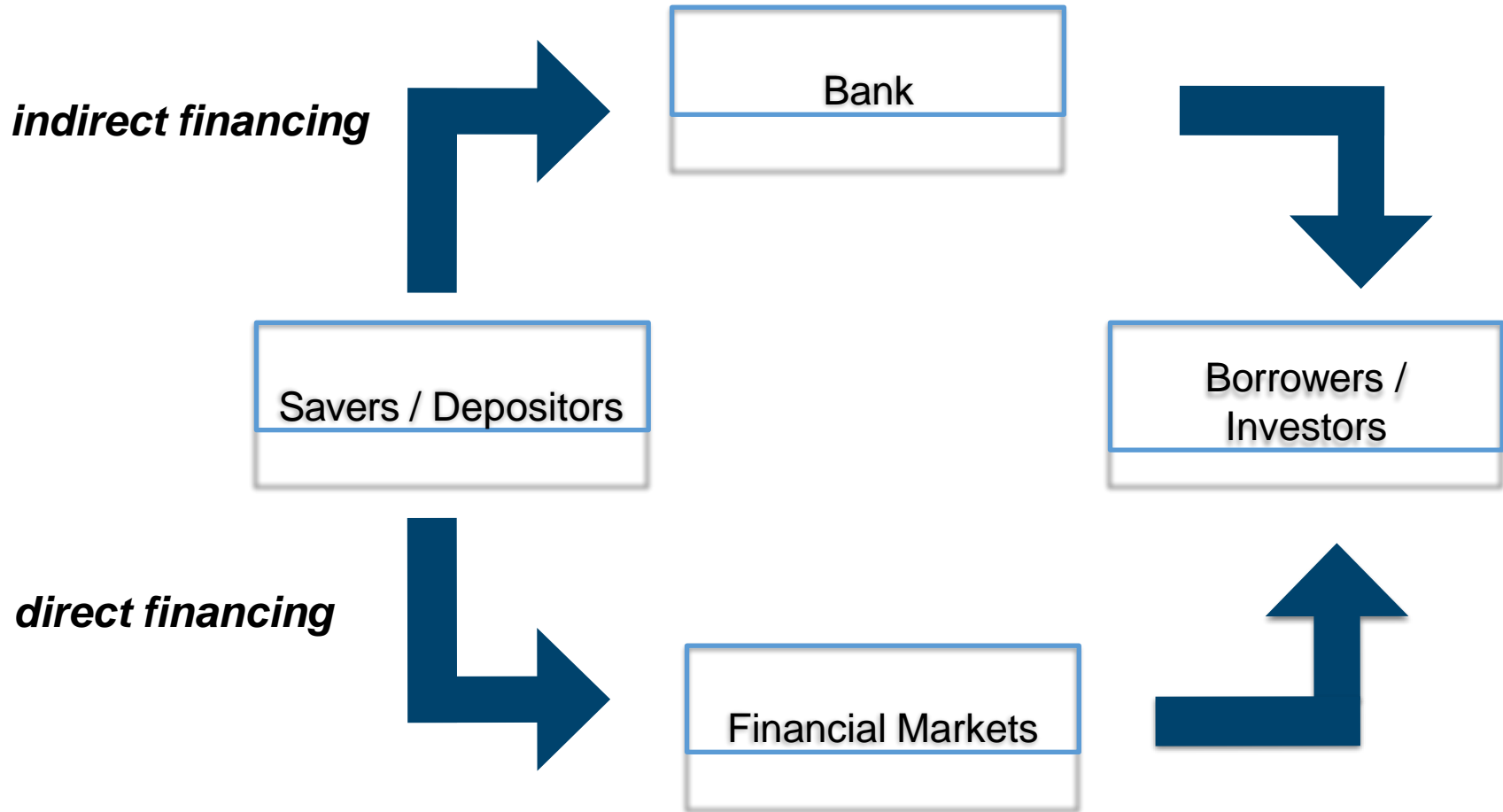
TIER II

The Legendary Bible of Financial Matters & Other galaxies,
aka as 'Financial Times'

& for those really keen on the mechanics of Banking:

- **Choudry, Moorad** - *An Introduction to Banking: Liquidity Risk and Asset - Liability Management*, Wiley (2011)

Menti Time 😊



...which makes it one of the largest industries...

In 2023, the global financial system intermediated \$410 trillion in assets, generating about \$7 trillion in revenue.

Global financial intermediation, 2023, \$ trillion

	Banks' bonds, other liabilities, and equity	Corporate and public deposits	Personal deposits	Sovereign wealth funds/pension funds	Retail AUM ¹	Private capital	Insurance and pension AUM	Other alternatives	Digital assets ¹	
Source of funds	59	52	65	32	78	10	66	9	39	410
	On-balance sheet			Off-balance sheet						
Use of funds	49	60	60	10	62	17	61	12	79	410
	Retail loans	Securities held on balance sheet	Corporate and public loans	Other assets	Government bonds	Corporate bonds	Equity securities	Securitized loans	Other investments ³	

Share of total annual revenue from global financial intermediation, by type, 2023,⁴ %

Retail banking 33	Payments ⁵ 16
Corporate and commercial banking 28	Investment banking 5
Wealth and asset management 14	Other ⁶ 3

\$6.8
trillion total

Market infrastructure² 2

Banking

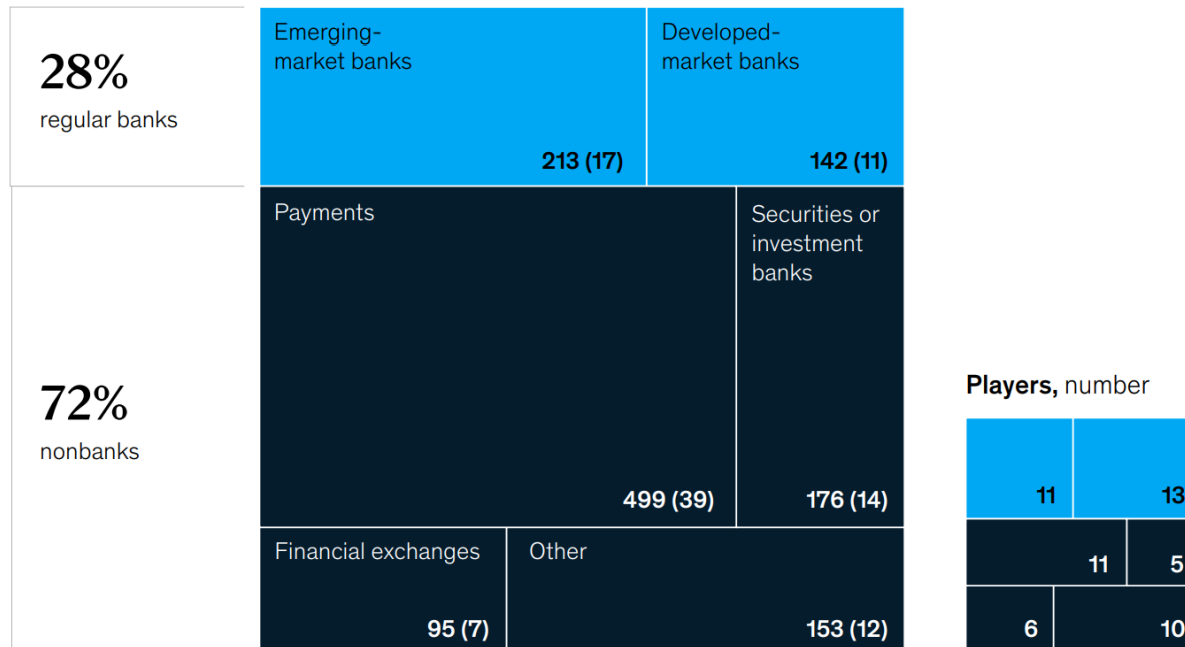
...Caught in an admirable web



Exhibit 2

Nonbank specialists in financial services accounted for more than 70 percent of about \$1.3 trillion in market capitalization.

Total market capitalization added,¹ \$ billion (%)



¹From Feb 19, 2020, to July 31, 2021.

Source: S&P Global; Corporate Performance Analytics by McKinsey

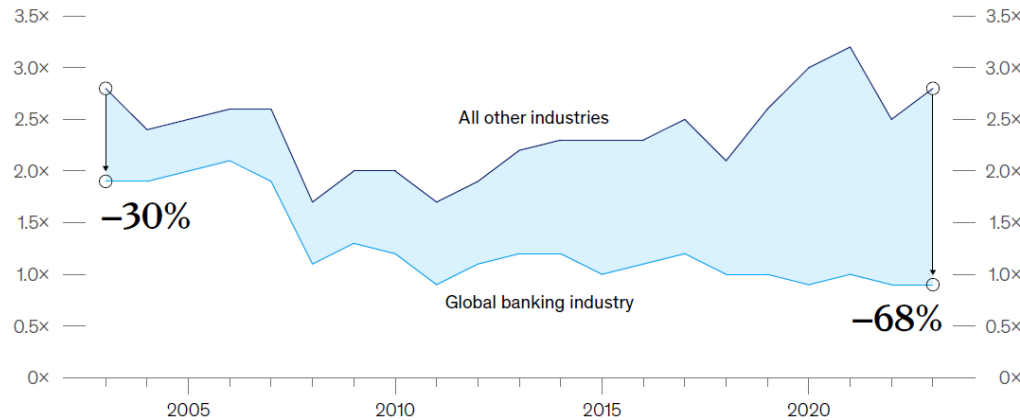
Banking

...with a very real implication

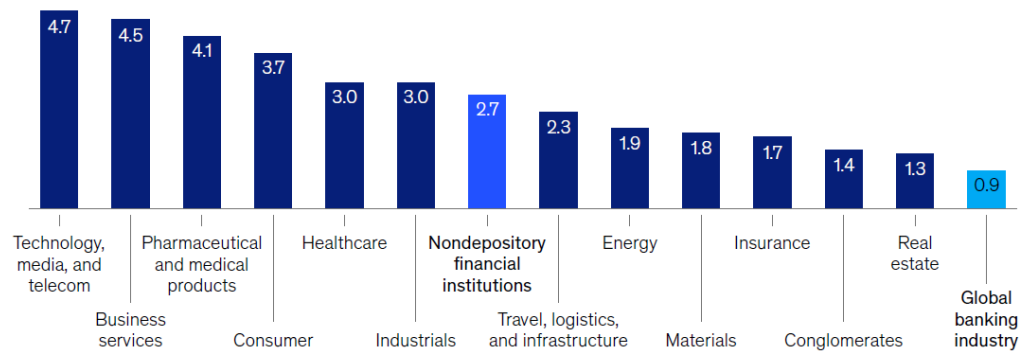
Exhibit 4

Capital markets place a large and growing valuation discount on banking relative to other industries.

Price-to-book ratio, 2003–23¹



Price-to-book ratio, by industry, 2023¹



¹Average excluding outliers and firms with a negative price-to-book ratio. Based on ~15,000 publicly traded companies. Source: McKinsey Panorama; McKinsey Value Intelligence

Banking

A future under threat?

Payments

How will customer needs and behaviours change in an increasingly cashless payments landscape?

How will the evolution of decentralised or non-traditional payment schemes change the role of traditional financial institutions?

Deposits & Lending

How will emerging alternative models of lending change the market dynamics of traditional lenders?

What will be the future role of financial institutions in response to continually shifting customer preferences?

Capital raising

How will the evolution of distributed capital raising impact the role of traditional intermediaries?

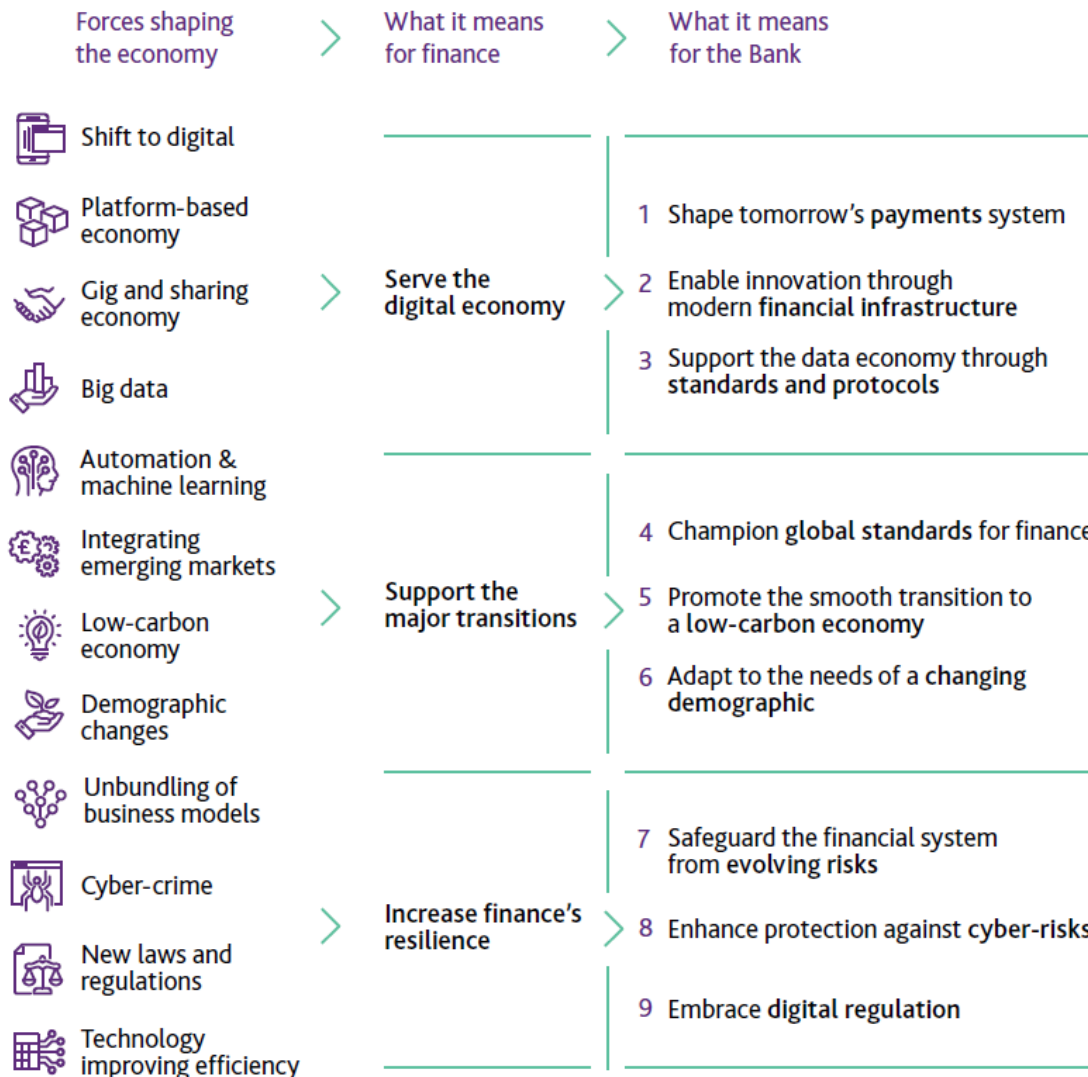
Investment Management

How will the empowerment of individuals through automated systems and social networks transform the business of investment management?

How will the externalisation of key processes transform the financial ecosystem?

Banking

What is the Purpose?



where do banks make money?

European banks

Eurozone bank shares poised for best year-end since 2010

Lenders brushed off concerns about hit from falling interest rates



The year 2024 marked one of the most profitable years for European banks thanks to higher rates and structural hedges © Kirill Kudryavtsev/AFP/Getty Images

Simon Foy, European Banking Correspondent DECEMBER 30 2024

where do banks sometimes lose and make money?

March 2020

JPMorgan braced for losses from 'fairly severe' recession

Net income falls by 69% in first quarter as America's biggest bank ramps up loan provisions



January 2021

US banks release billions from reserves in anticipation of lower Covid losses

JPMorgan, Citi and Wells Fargo cite vaccine rollout and better economic outlook



January 2024

US regional banks hope for profit revival as pain from SVB fallout eases

Depositors are less likely to flee mid-sized lenders than they were following the banking turmoil of 2023



Cincinnati-based Fifth Third is one of the regional lenders that suffered a fall in profits in the fourth quarter because of the lingering fallout of last year's banking crisis

Joshua Franklin and Stephen Gandel in New York JANUARY 29 2024



US regional bank executives say the pressure to pay up to keep depositors from leaving, which cut profits last year, is easing, paving the way for better earnings after the collapse of Silicon Valley Bank hurt mid-sized lenders last year.

why do banks need to make money?

Spanish lender Santander boosts capital position

Bank projects acceleration in profit growth after upbeat end to 2019



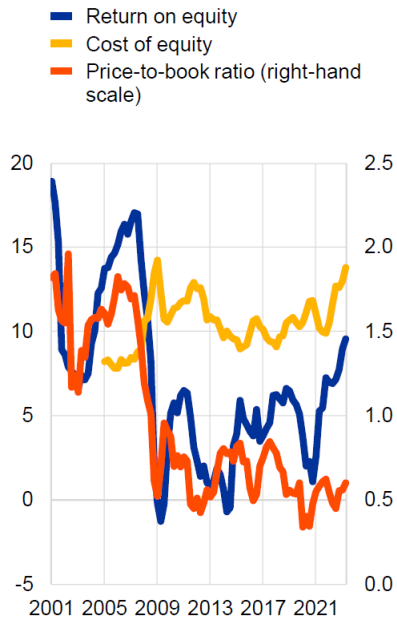
29 January 2020

Chart 3.1

Bank profitability has reached levels last seen 15 years ago, on the back of rising net interest income

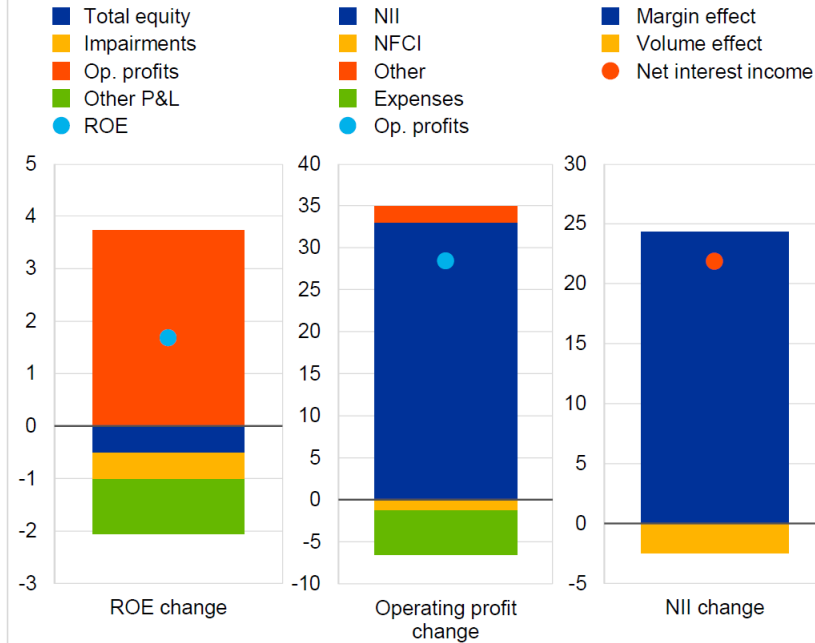
a) ROE, COE and market valuation of euro area banks

(Q1 2001-Q2 2023, percentages)



b) Decomposition of changes in significant institutions' ROE, operating profits and net interest income

(Q3 2022-Q2 2023, percentages, percentage points)

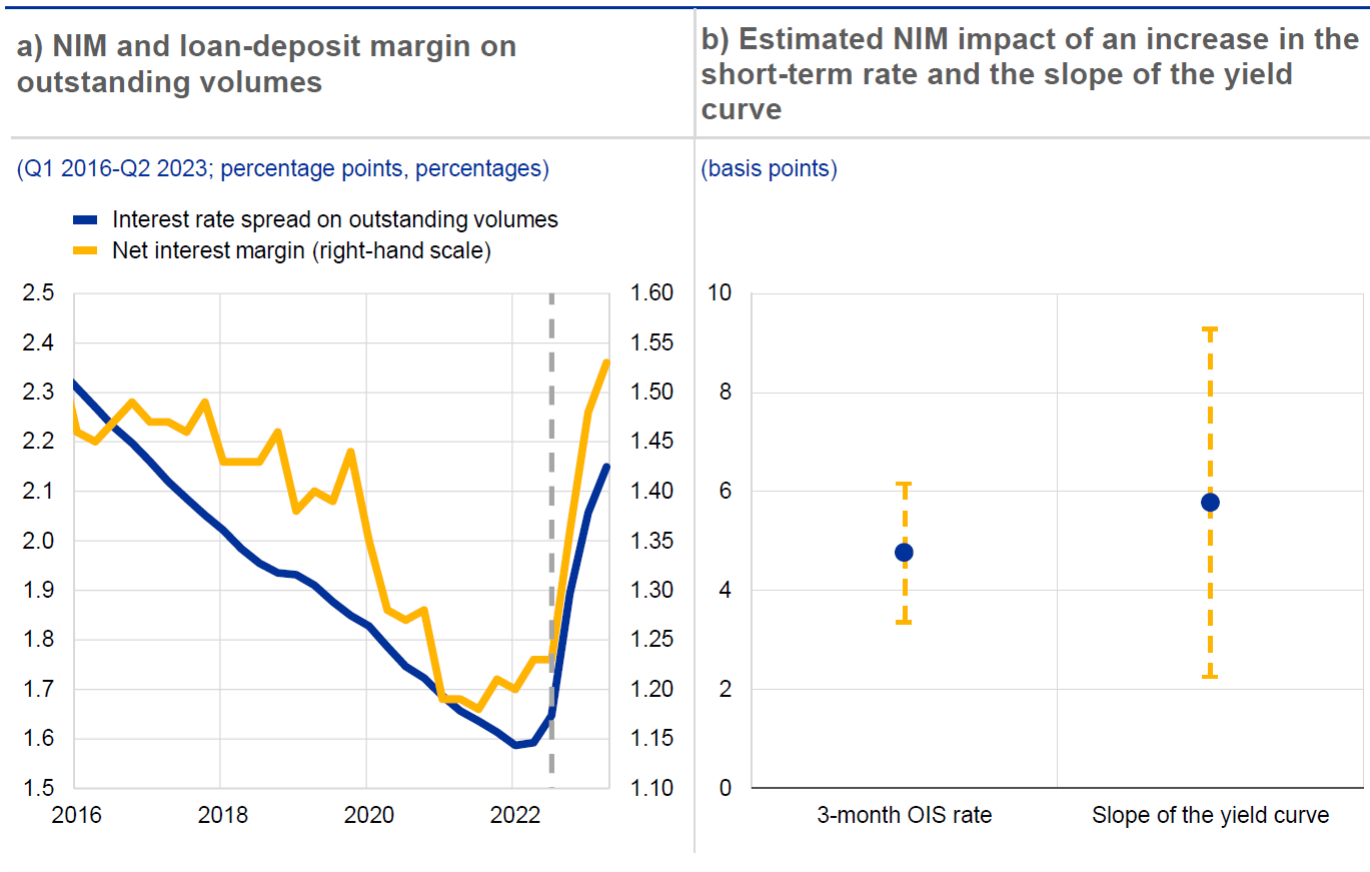


Key words

- **ROE**
- **P/BV: Price to Book value**
- **COE: Cost of Equity**

Chart A.5

Higher short-term interest rates and a steeper yield curve have, on average, a positive impact on euro area banks' margins



Key words

- **NIM: Net Interest Margin**
- **Loan-deposit margin**

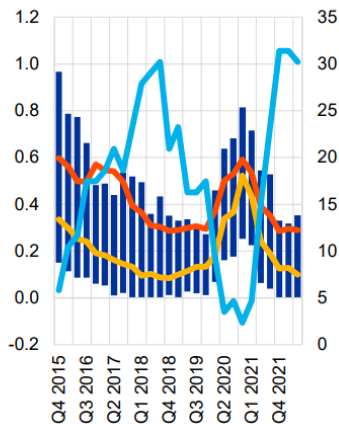
Chart 3.8

Changes in banks' cost of risk were heterogeneous, but around half the banks recorded increases, partly due to high exposures to energy-intensive sectors

a) Loan loss provisions to total loans and share of banks with net releases

(Q4 2015-Q2 2022, percentages)

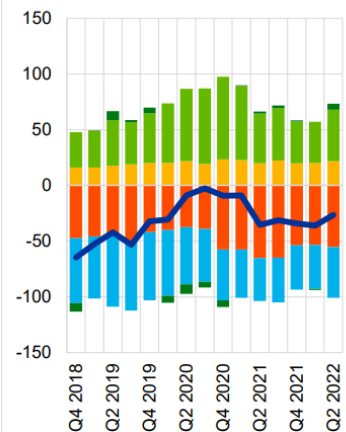
■ Interquartile range
— Median
— Weighted average
— Share of banks with net releases (right-hand scale)



b) Change in loan loss reserves and its drivers

(Q4 2018-Q2 2022, € billions)

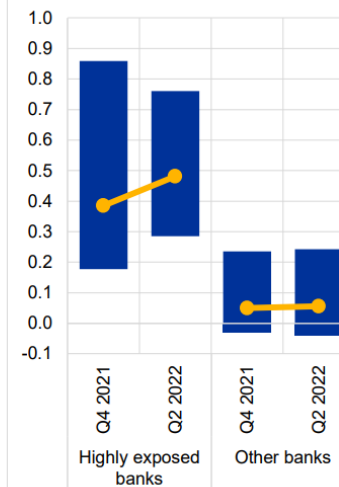
■ Change in LLR
■ Origination and acquisition
■ Derecognition, repayments and disposals
■ Changes due to change in credit risk (net)
■ Write-offs
■ Other adjustments



c) Loan loss provisions to total loans by energy intensity of exposures

(Q4 2021-Q2 2022, percentages)

● Median
■ Interquartile range



Sources: ECB supervisory data and ECB calculations.

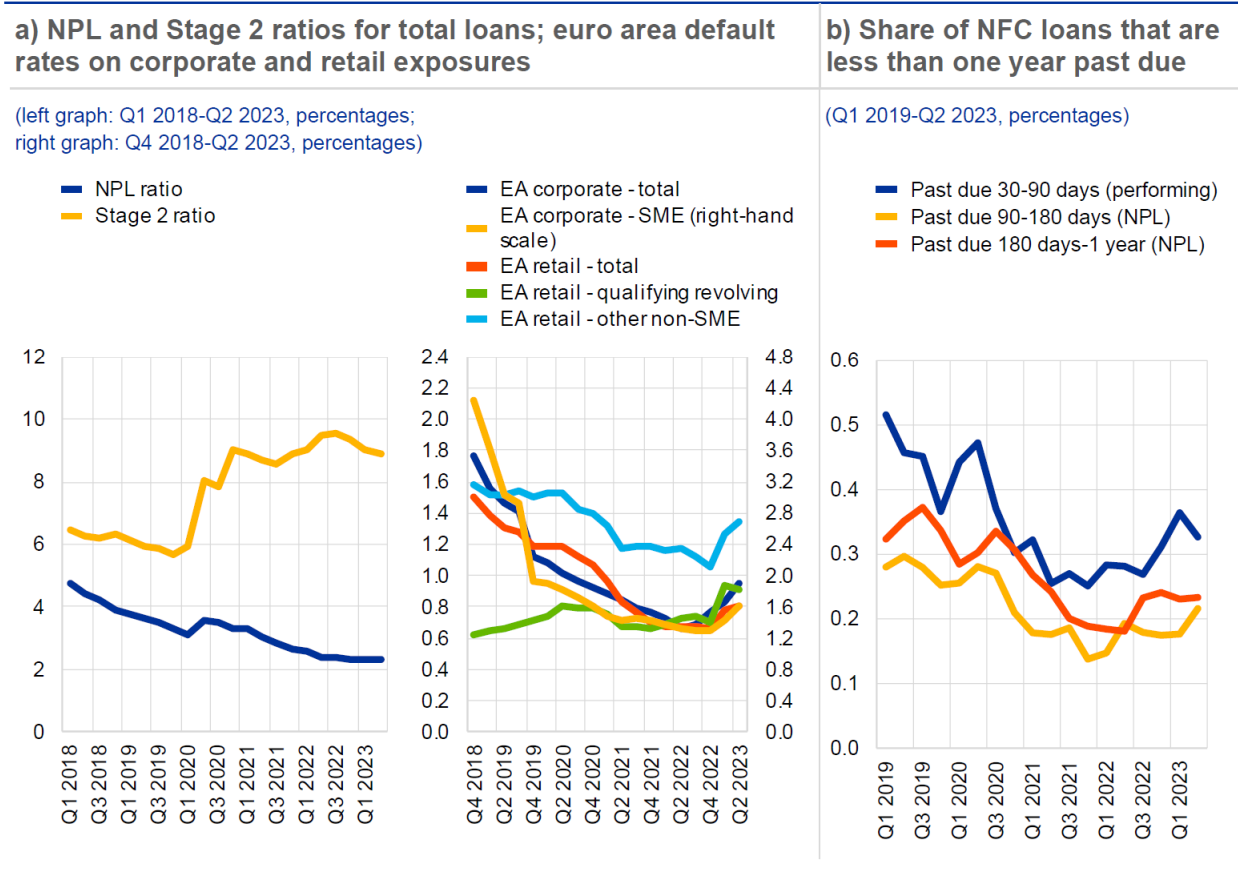
Notes: Based on a balanced sample of 86 significant institutions. Panel a: based on four-quarter trailing figures. Panel b: the chart shows a decomposition of the change in the stock of provisions which does not correspond to net flows of provisions in the profit and loss account. LLR stands for loan loss reserves. Panel c: highly exposed banks are those in the top quartile of exposures to energy-intensive sectors. Based on four-quarter trailing figures.

Key words

- **Cost of risk:**
losses on
defaulted loans
(= impairments
or 'Loan Loss
Provisions (LLP)
- **NPL: Non-**
performing
loans

Chart 3.4

NPL ratio remains stable, while default rates and payment arrears increase from low levels



Key words

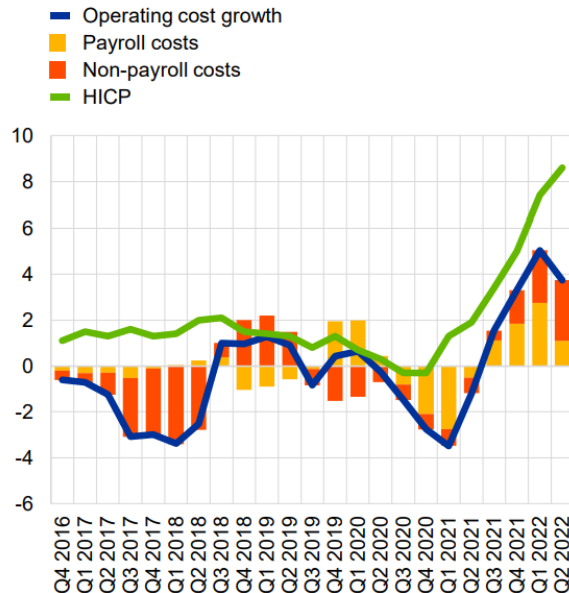
- **NPL: Non-performing loans – loans which have defaulted and have not yet been totally written-off**
- **Past-due**
- **Stage 2**

Chart 3.7

Banks' operating expenses increased but at a slower rate than inflation and revenues

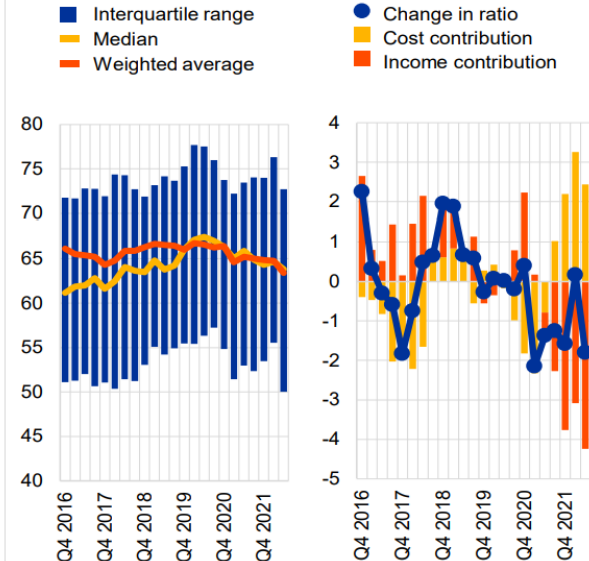
a) Operating expense growth, contributing factors and inflation

(Q4 2016-Q2 2022, percentages and percentage points)



b) Changes in cost-to-income ratios and contributing factors

(Q4 2016-Q2 2022, percentages and percentage points)



Sources: ECB supervisory data and ECB calculations.

Notes: Based on four-quarter trailing figures for a balanced sample of 86 significant institutions. Panel a: HICP stands for the Harmonised Index of Consumer Prices.

Key words

- **Cost-to-Income (CTI): Ratio between OPEX and Banking income**

Variations:

- *CTI on total income banking income*
- *CTI on banking income excluding Trading gains*

Key financial performance indicators benchmark 2018

		NII / (Net loans + Deposits)	CBI ¹ / (Net loans + deposits)	Cost / (Net loans + Dep.)	Cost to core income ²	Cost of Risk ³	(CBI-Opex-Prov. ⁵) / (Net loans + Dep.)	Net loans / Deposits
Retail	NB ⁴ Recurrent ⁶	0.45%	1.05%	1.09%	104%	0.12%	-0.08%	63%
	M Portugal	0.87%	1.64%	1.06%	59%	0.06%	0.65%	78%
	Portugal	0.96%	1.55%	1.01%	65%	0.08%	0.50%	104%
SMEs & Corporate	NB ⁴ Recurrent ⁶	1.32%	1.94%	0.48%	25%	0.56%	1.14%	116%
	M Portugal	1.24%	2.04%	0.70%	34%	3.32%	-0.75%	131%
	Portugal	1.05%	1.43%	0.34%	23%	-0.06%	1.14%	171%
Total	NB ⁴ Recurrent ⁶	0.85%	1.44%	0.92%	63%	0.92%	0.03%	87%
		0.76%	1.36%	0.91%	67%	0.17%	0.38%	79%
	M Portugal	1.11%	1.69%	0.88%	52%	1.12%	0.27%	92%
	Portugal	1.11%	1.60%	0.78%	49%	0.08%	0.87%	103%
		1.05%	1.46%	0.87%	60%	0.22%	0.49%	81%
		0.98%	1.58%	1.00%	63%	0.21%	0.47%	89%
	BBVA Spain	1.05%	1.53%	0.93%	61%	0.22%	0.49%	94%
	Spain	0.94%	1.51%	0.97%	64%	0.35%	0.39%	81%
	S Spain	1.26%	1.87%	0.92%	49%	0.56%	0.67%	98%

Best-in-class

Key words

- **NII: Net interest income**
- **CBI: Comercial Banking Income**
- **Cost-to-Income**
- **OPEX: Operational expenditures (Staff, SG&A, depreciation)**
- **Cost of risk: losses on defaulted loans**
- **Net Loans/Deposits: loan-to-deposit ratio**

Structure of different bank types

Balance sheet

UNIVERSAL BANK

Balance sheet

Loans and advances to customers	590,822
Cash, central banks and credit institutions	247,362
Debt instruments	70,762
Other financial assets	48,326
Other asset accounts	30,408
Total assets	987,681
Customer deposits	608,939
Central banks and credit institutions	194,697
Marketable debt securities	75,468
Other financial liabilities	51,041
Other liabilities accounts	11,208
Total liabilities	941,353
Total equity	46,328

(Santander Europe, 2021Q3)

INVESTMENT BANK

\$ in millions

Assets

	As of December	
	2020	2019
Cash and cash equivalents	\$ 155,842	\$133,546
Collateralized agreements:		
Securities purchased under agreements to resell (at fair value)	108,060	85,691
Securities borrowed (includes \$28,898 and \$26,279 at fair value)	142,160	136,071
Customer and other receivables (includes \$82 and \$53 at fair value)	121,331	74,605
Trading assets (at fair value and includes \$69,031 and \$66,605 pledged as collateral)	393,630	355,332
Investments (includes \$82,778 and \$57,827 at fair value, and \$13,375 and \$10,968 pledged as collateral)	88,445	63,937
Loans (net of allowance of \$3,874 and \$1,441, and includes \$13,625 and \$14,386 at fair value)	116,115	108,904
Other assets	37,445	34,882
Total assets	\$1,163,028	\$992,968

Liabilities and shareholders' equity

Deposits (includes \$16,176 and \$17,765 at fair value)	\$ 259,962	\$190,019
Collateralized financings:		
Securities sold under agreements to repurchase (at fair value)	126,571	117,756
Securities loaned (includes \$1,053 and \$714 at fair value)	21,621	14,985
Other secured financings (includes \$24,126 and \$18,071 at fair value)	25,755	19,277
Customer and other payables	190,658	174,817
Trading liabilities (at fair value)	153,727	108,835
Unsecured short-term borrowings (includes \$26,750 and \$26,007 at fair value)	52,870	48,287
Unsecured long-term borrowings (includes \$40,911 and \$43,661 at fair value)	213,481	207,076
Other liabilities (includes \$263 and \$150 at fair value)	22,451	21,651
Total liabilities	1,067,096	902,703

(Goldman Sachs, Annual Report 2020)

Structure of different bank types

Profit & Loss account

UNIVERSAL BANK (Banco Santander, Spain)

EUR million	9M'21	9M'20	% change	
			Euros	Constant euros
NII	24,654	23,975	3	7
Net fee income	7,810	7,559	3	8
Trading and other income	2,162	2,071	4	8
Total income	34,626	33,605	3	8
Operating expenses	-15,778	-15,726	0	4
Net operating income	18,848	17,879	5	11
LLPs	-5,973	-9,562	-38	-34
Other results	-1,443	-1,301	11	15
Underlying PBT	11,432	7,016	63	74
Underlying att. profit	6,379	3,658	74	87
Net capital gains and provisions ²	-530	-12,706	-96	-96
Attributable profit	5,849	-9,048	—	—

(Santander consolidated, 2021Q3)

INVESTMENT BANK (Goldman Sachs, US)

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES Consolidated Statements of Earnings

in millions, except per share amounts	Year Ended December			Year Ended December		
	2020	2019	2018	2020	2019	2018
Revenues						
Investment banking	\$ 9,141	\$ 6,798	\$ 7,430	9,141	6,798	7,430
Investment management	6,923	6,189	6,590	6,923	6,189	6,590
Commissions and fees	3,548	2,988	3,199	3,548	2,988	3,199
Market making	15,546	10,157	9,724	15,546	10,157	9,724
Other principal transactions	4,651	6,052	5,906	4,651	6,052	5,906
Total non-interest revenues	39,809	32,184	32,849	39,809	32,184	32,849
Interest income	13,689	21,738	19,679	13,689	21,738	19,679
Interest expense	8,938	17,376	15,912	8,938	17,376	15,912
Net interest income	4,751	4,362	3,767	4,751	4,362	3,767
Total net revenues	44,560	36,546	36,616	44,560	36,546	36,616
Provision for credit losses	3,098	1,065	674	3,098	1,065	674
Operating expenses						
Compensation and benefits	13,309	12,353	12,328	13,309	12,353	12,328
Transaction based	4,141	3,513	3,492	4,141	3,513	3,492
Market development	401	739	740	401	739	740
Communications and technology	1,347	1,167	1,023	1,347	1,167	1,023
Depreciation and amortization	1,902	1,704	1,328	1,902	1,704	1,328
Occupancy	960	1,029	809	960	1,029	809
Professional fees	1,306	1,316	1,214	1,306	1,316	1,214
Other expenses	5,617	3,077	2,527	5,617	3,077	2,527
Total operating expenses	28,983	24,898	23,461	28,983	24,898	23,461
Pre-tax earnings	12,479	10,583	12,481	12,479	10,583	12,481
Provision for taxes	3,020	2,117	2,022	3,020	2,117	2,022
Net earnings	9,459	8,466	10,459	9,459	8,466	10,459
Preferred stock dividends	544	569	599	544	569	599
Net earnings applicable to common shareholders	\$ 8,915	\$ 7,897	\$ 9,860	8,915	7,897	9,860

Income Statement

	Interest Income	}
-	Interest Expense	
=	Net Interest Income	}
-	Provision for Loan Losses	
+	Non Interest Income	
+	Trading Gains and Losses	
-	Non Interest Expense	
=	Pretax Earnings	
-	Taxes	
=	Net Earnings	

Income by Activity

Loans and Deposits
Fees and Commissions
Securities Income
Other
30
NII + Non Interest Income

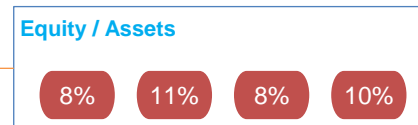
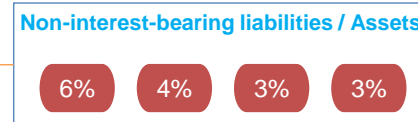
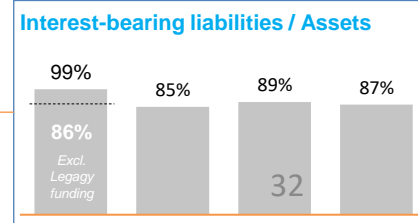
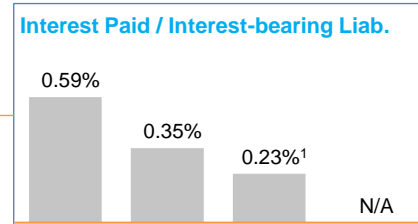
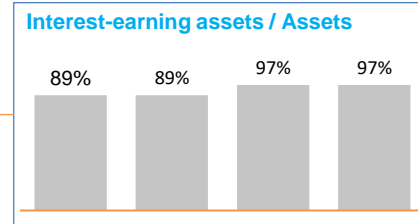
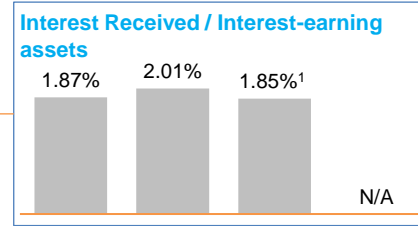
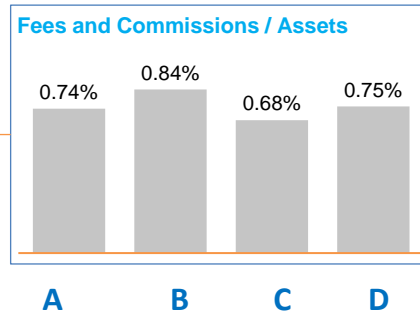
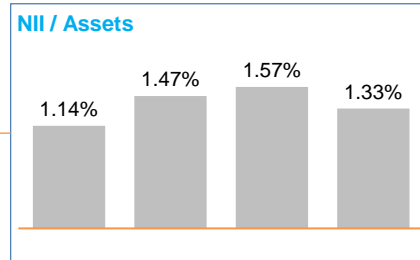
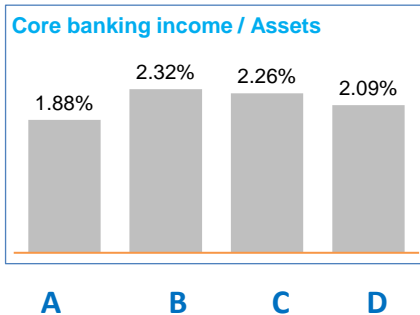
Profitability drivers

Dupont adapted

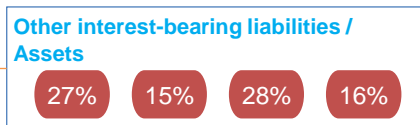
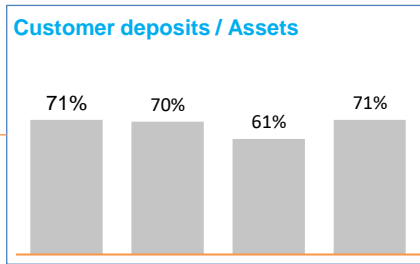
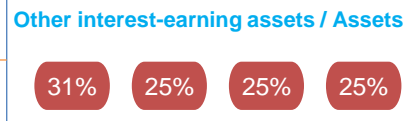
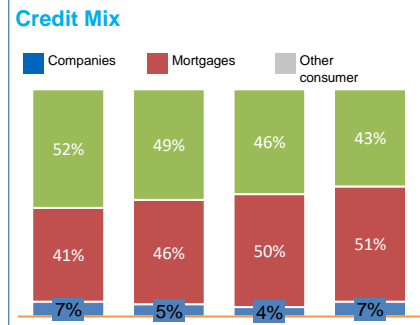
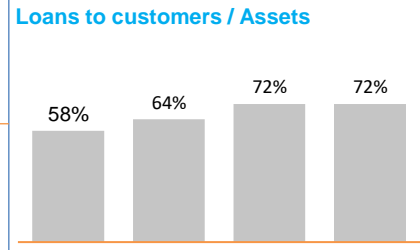
$$\text{ROE} = \frac{\text{Net Income}}{\text{Equity}}$$

$$\text{ROE} = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

Efficiency	Rotation	Leverage
<ul style="list-style-type: none"> . Net Interest Margin . Fee Income . Trading income . Cost efficiency . Losses on loan defaults 	<ul style="list-style-type: none"> . Loan maturity . Trading strategy 	<ul style="list-style-type: none"> . Loan to Deposits ratio . Funding strategy excl. Dep. . Common Equity . Asset leverage



Profitability drivers A practical example



The 2008 financial crisis

The beginning of an era

TOO BIG TO FAIL (2011)

- Inspired by the best-seller book by Andrew Ross Sorkin, it covers the downfall of Lehman Brothers in 2008 and the ensuing market disruption through the lens of Hank Paulson (Treasury Secretary) and Ben Bernanke (Fed Chairman).
- **Section:** markets' reaction to Lehman's demise
- **Main characters:**

Hank Paulson
& advisers



Ben Bernanke
Fed Chairman



Lloyd Blankfein
Goldman Sachs CEO



Tim Geithner
President of the New York Fed



John Mack
Morgan Stanley CEO



Overview of Banking

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