

BankDirector.

Lunch & Learn Session 2:
**Leveraging Data to Tell
Your Financial Story**

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Empyrean Solutions, LLC

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Empyrean Solutions, LLC

#A0BA24

Empyrean Solutions Presentation

LEVERAGING DATA TO TELL YOUR FINANCIAL STORY

January 28, 2024



OPENING THOUGHT



TODAY'S SPEAKER



KENNETH LEVEY

Managing Director
Empyrean Solutions

With over forty years experience in the financial institution industry, Ken is currently responsible for the overall budgeting and planning strategy for Empyrean Solutions.

Prior to joining Empyrean, Ken worked at Syntellis (formerly Kaufman Hall/Axiom Software) and led the overall product and business strategy for the Banking solutions that reside on Syntellis' Axiom Software platform. Previously Ken was the Senior Director for Banking Analytics at SAP BusinessObjects where he was responsible for developing performance management and analytic applications for the Banking Industry.

Ken started his career at Bear Stearns in New York and then Seamen's Bank for Savings, before moving to a senior position at IPS-Sendero (Fiserv), where he led the development of the Asset/Liability Management system and managed the ALM and Funds Transfer Pricing implementation and consulting divisions.

TODAY'S SPEAKER



BRYAN RIDGWAY

Director, Performance Management
Empyrean Solutions

With thirty years of experience in the financial risk and performance management areas within the banking industry, Bryan's current responsibilities include assisting clients and prospects in understanding how Empyrean solutions can help analyze and improve their overall financial performance.

He is a frequent speaker at national and regional professional meetings and webinars and has authored numerous articles for industry publications.

Bryan holds an M.B.A. in Global Management with emphases in Finance, European Studies, and German from the Thunderbird School of Global Management, and a B.S. in Business Administration from Pepperdine University.

AGENDA

- 1** Required Expertise of the CFO / Finance Organization
- 2** Telling the Financial Story
- 3** Recap, Final Thoughts, Q&A



REQUIRED EXPERTISE

Accounting	Accounting Rules & Regulations	Financial Statement Analysis	Tax Codes	Interest Rates
Economy	Real Estate	Stocks & Commodities	Macro Economic Factors	Micro Economic Factors
Industry	Bank Regs and Policies	Product Expertise	Digital Transformation	Industry & Trade Organizations
Data	Networking	Risk & Performance Analysis	Peer Analysis	M&A
Reporting, Dashboards, KPI	General Ledger	Operational Data	Customer Data	Instrument Data
Profitability	Data Governance	Management & Board Reporting	Regulatory Reporting	SEC Reporting
Budgeting and Planning	KPIs	Benchmarking	Analytics	Decision Support
Risk	FTP	Costing	Capital	Customer, Product, Org.
M&A	Strategic Plan	Budget	Forecast	Scenario Analysis
Leadership	Interest Rate Risk	Liquidity Risk	Credit Risk	Stress Testing
	M&A Research	M&A Projections	M&A Conversion	Transparency
	Employee Engagement	Educator	Goal Setting & Achievement	Communication

REQUIRED EXPERTISE

Accounting	Accounting Rules & Regulations	Financial Statement Analysis	Tax Codes	Interest Rates
Economy	Real Estate	Stocks & Commodities	Macro Economic Factors	Micro Economic Factors
Industry	Bank Regs and Policies	Product Expertise	Digital Transformation	Industry & Trade Organizations
Data	Networking	Risk & Performance Analysis	Peer Analysis	M&A
Reporting, Dashboards, KPI	General Ledger	Operational Data	Customer Data	Instrument Data
Profitability	Data Governance	<p>You need to be experts in these areas in order to understand and communicate the impact to your institution!</p>	SEC Reporting	
Budgeting and Planning	KPIs		Decision Support	
Risk	FTP	Costing	Capital	Customer, Product, Org.
M&A	Strategic Plan	Budget	Forecast	Scenario Analysis
Leadership	Interest Rate Risk	Liquidity Risk	Credit Risk	Stress Testing
	M&A Research	M&A Projections	M&A Conversion	Transparency
	Employee Engagement	Educator	Goal Setting & Achievement	Communication

THE NEW ROLE OF FINANCE

Top Skills Actively Introduced Into Finance

Data Exploration & Analysis

41%

Scenario Planning & Horizon Planning

38%

Innovation

37%

Storytelling

34%

(Source: Accenture, CFO Now: Breakthrough speed for breakout value)



THE NEW ROLE OF FINANCE

• THE CHIEF STORYTELLER

- Knowledge center of the organization
- Data stewardship beyond the financials
- Ability to forecast and understand results **better than anyone**

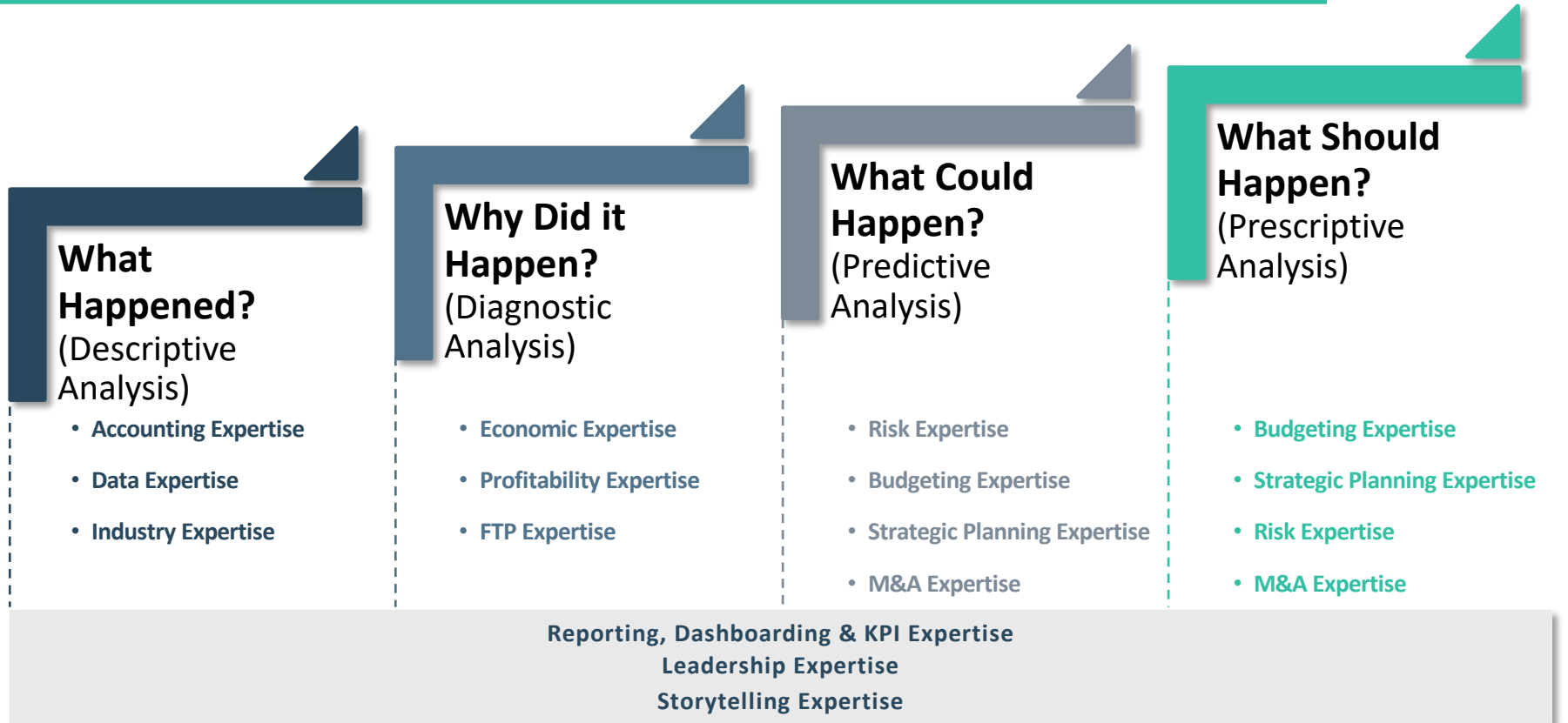
• THE STRATEGIC ADVISOR TO THE ORGANIZATION

- Strategic thinker
- A main contributor with a “**seat at the table**”
- Understands the **risk-reward** relationship



CHAPTERS OF THE FINANCIAL STORY

The expertise required to tell the story



WHAT HAPPENED?

- Analyze current results & past trends
- Types of Reporting & Analysis:
 - Bank Industry Graphs, Peer Data Graphs
 - Financial, Management, Regulatory, SEC
 - KPI's and KRI's, Comparative Analysis, Variance Analysis
- Types of Data:
 - Market; Call Report; Peer Data
 - GL; Loan, Deposit, Investment; Transaction; Operational Data
 - Regulatory Requirements

WHY DID IT HAPPEN?

- Investigate why we got those results & why it matters
- Types of Analysis
 - Root cause analysis (balance scorecard, Dupont analysis, fishbone analysis)
 - External drivers & Internal drivers
 - Profitability Analysis (margin, costs, non-interest income, etc.)
 - Budget to Actual Analysis (*Rate Volume Variance*; Variance Explanations)
 - Deposit & Loan Analytics

WHY DID IT HAPPEN?

- *Types of Data*

- Financial Data: GL; Loan, Deposit, Investment; Transaction; Budget
- Operational Data: Customer; Product; Channel; Other Operational Data;
- Statistical Data: Internal Pricing; Prepayment; Credit; Cost; Risk Data
- Market Data: interest rates, prepayments, credit quality, economic, etc.)
- Non-financial input: explanations of variances

WHAT COULD HAPPEN?

- Perform *Scenario Analysis*
 - Forecast various scenarios to project the financial & risk impacts
- Identify where we can improve
 - High level, as well as product / segment / team / operational opportunities
- Run additional what-if scenarios for each opportunity
- Analyze the results
 - From performance, risk & operational perspectives

WHAT COULD HAPPEN?

Types of Analysis

- Asset Liability Management (ALM)
- Liquidity Stress Testing
- Credit Stress Testing
- Capital Stress Testing
- Deposit Analytics
- Profitability Analysis (Projected)
- Planning “What-if” Analysis

Types of Data

- Financial (GL, & Instrument)
- Financial Assumptions
 - Growth, interest rates, prepayments, credit, deposits, etc.
- Market Data
- Operational Data

WHAT SHOULD HAPPEN?

Strategic & Tactical Analysis Projections

What Should Happen?
(Prescriptive Analysis)

- Identify the assumptions and scenarios that produce
 - best risk-reward combination
 - biggest impact
 - best organizational fit
- Leverage the expertise of the finance organization
 - External expertise (industry, economy, regulations, etc.)
 - Internal expertise (products, strategy, risk management, collaboration, etc.)
 - Previous analysis (descriptive, diagnostic, predictive)
- Create a strategic plan to define what the organization should do
- Create a detailed tactical plan (aka, your budget) to meet your goals
 - Projecting the expected financial impact
 - Accounting for operational changes and related costs

WHAT SHOULD HAPPEN?

Strategic & Tactical Analysis

What Should Happen?
(Prescriptive Analysis)

Types of Analysis & Data:

- Same as What Could Happen + Operational detail

Next Steps:

- Review strategies with your stakeholders to agree on operational plans
 - Pricing Strategies
 - Marketing Strategies
 - Operations (IT, Channels, HR, LOB Managers, etc.)
 - “C” level suite
- Communicate results and expectations throughout the organization



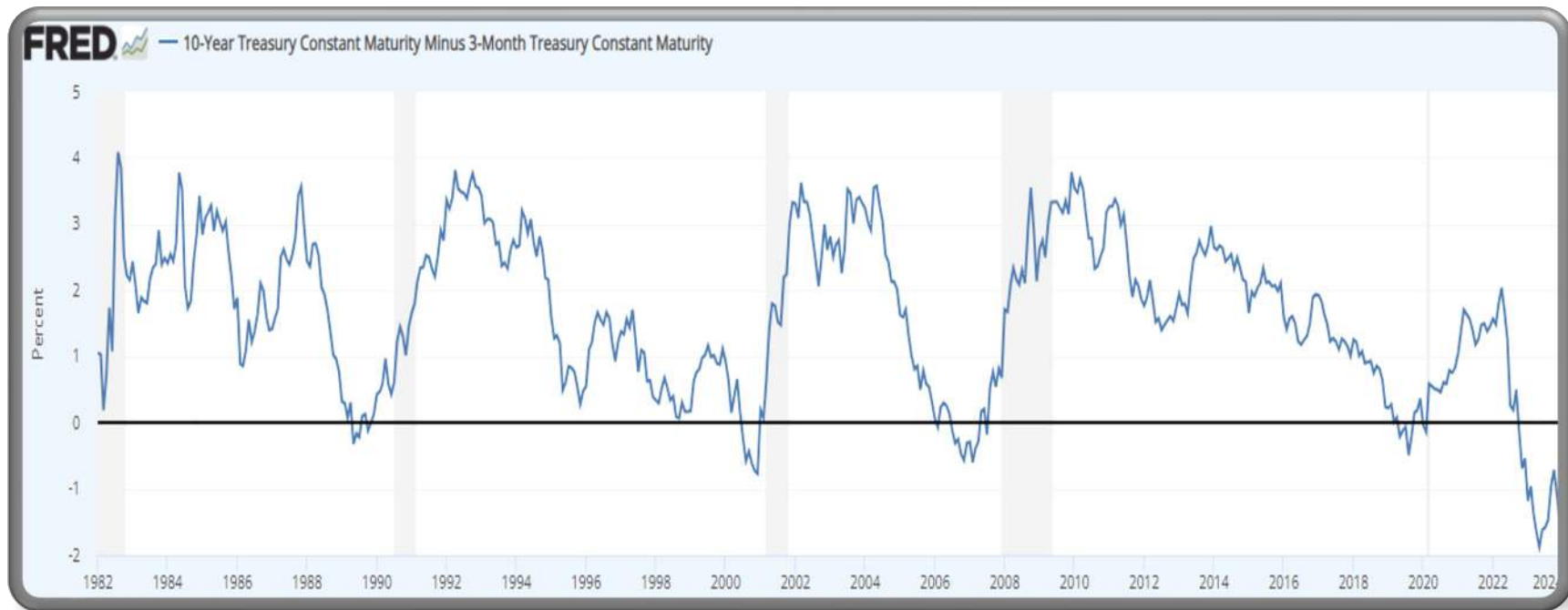
THE FINANCIAL STORY

CHAPTER 1: WHAT HAPPENED?

WHAT HAPPENED - MARKET

What Happened?
(Descriptive Analysis)

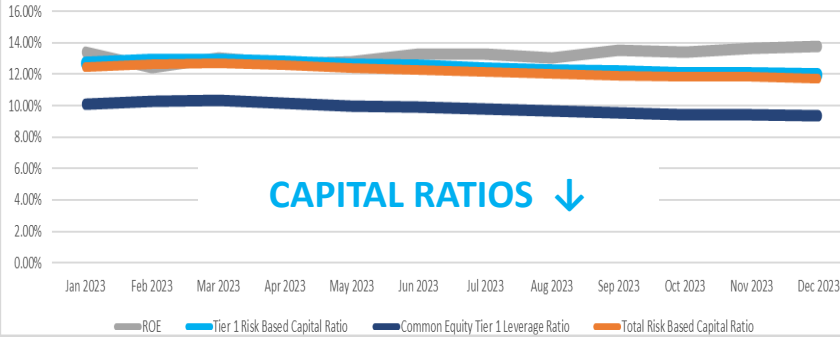
CONTINUED YIELD CURVE INVERSION (10yr – 3mo Spread)



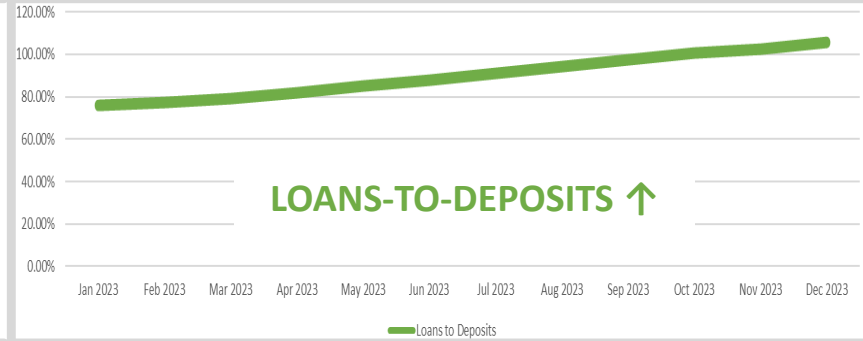
WHAT HAPPENED – ES BANK

What Happened?
(Descriptive Analysis)

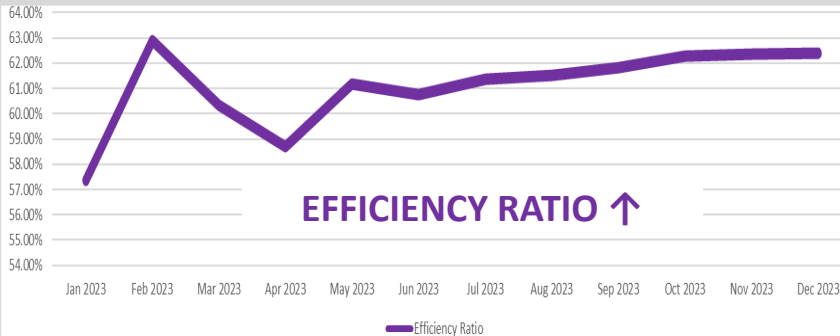
Capital Ratios



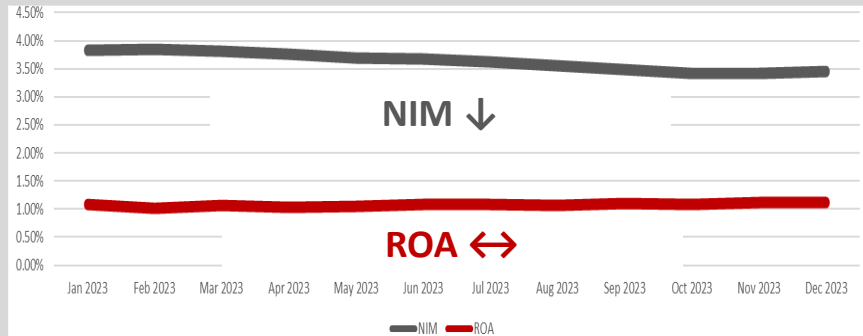
Loans-to-Deposits



Efficiency Ratio



NIM and ROA



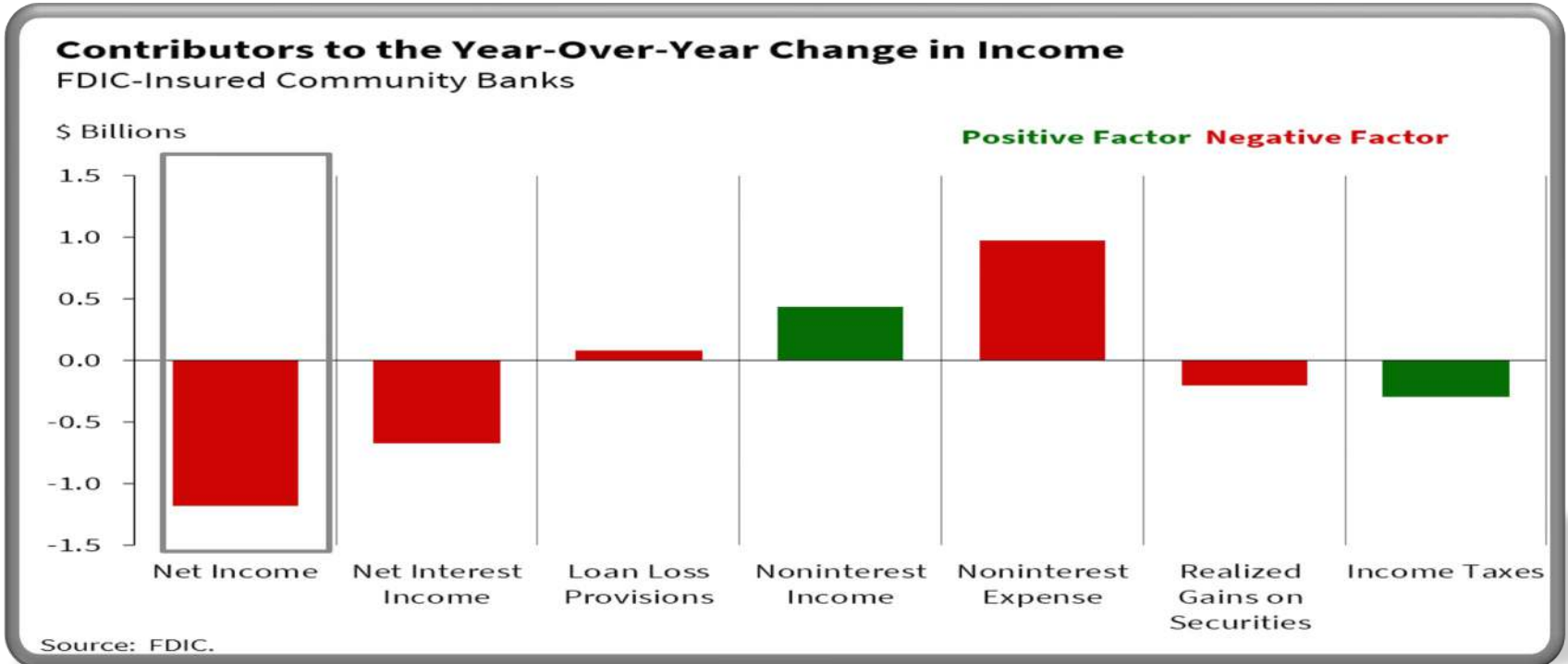


THE FINANCIAL STORY

CHAPTER 2: WHY DID IT HAPPEN?

WHY DID IT HAPPEN - MARKET

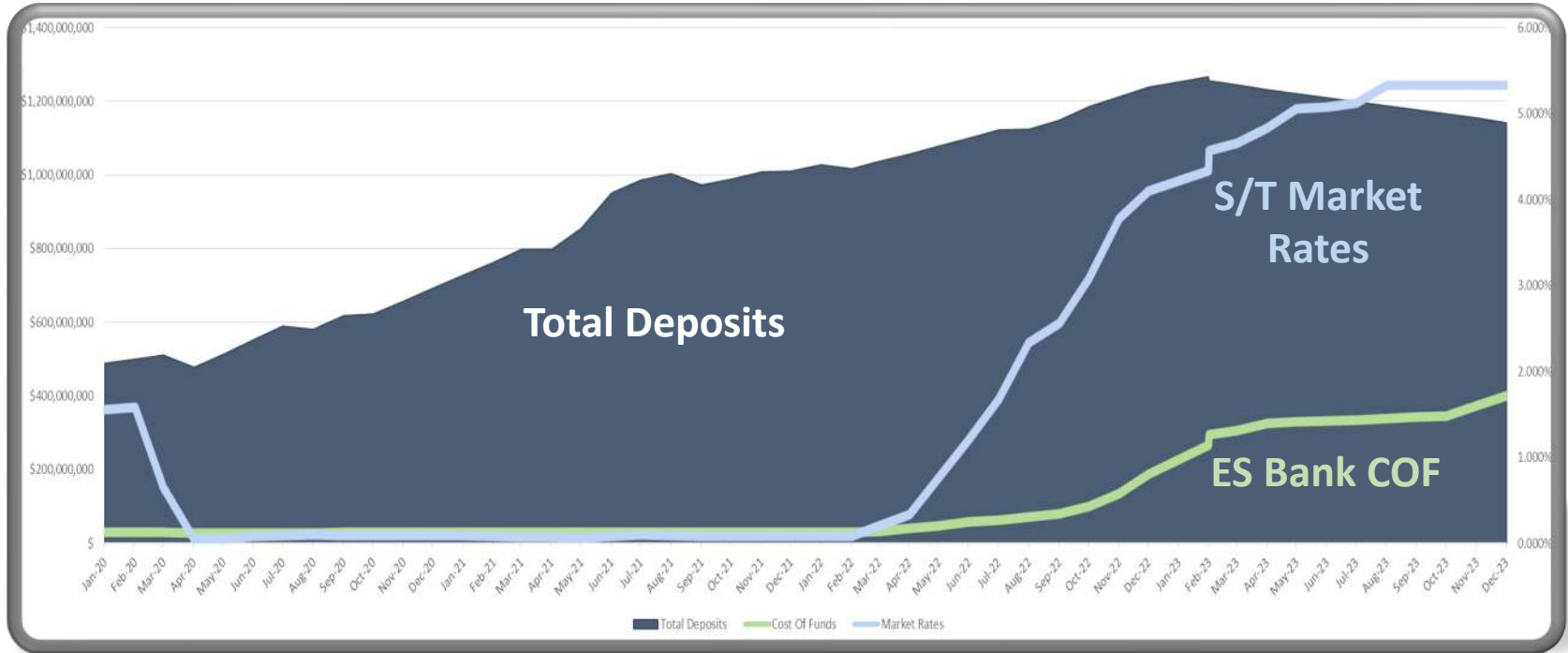
NET INCOME DECREASE: Driven by ↓ Net Int Inc. & ↑ Non-Int Exp.



WHY DID IT HAPPEN - ES BANK

Why Did it Happen?
(Diagnostic Analysis)

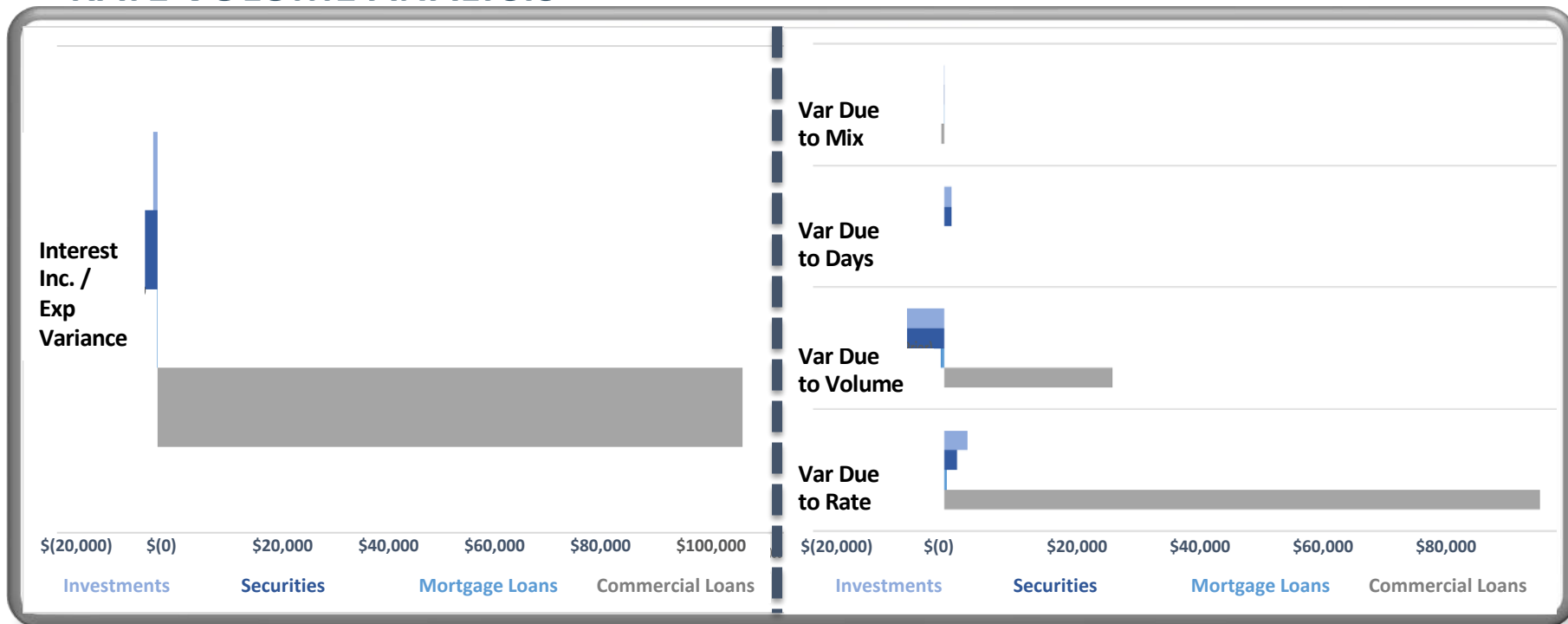
DEPOSIT BETA ANALYSIS: DEPOSIT RUNOFF; INCREASED RATE SENSITIVITY



WHY DID IT HAPPEN - ES BANK

Why Did it Happen?
(Diagnostic Analysis)

RATE VOLUME ANALYSIS





THE FINANCIAL STORY

CHAPTER 3: WHAT COULD HAPPEN?

WHAT COULD HAPPEN – MARKET

What Could Happen?
(Predictive Analysis)

U.S. BANK FORECAST

U.S. Forecast : Banks Generate Reasonable Profits Despite Funding Pressure

S&P Global
Ratings

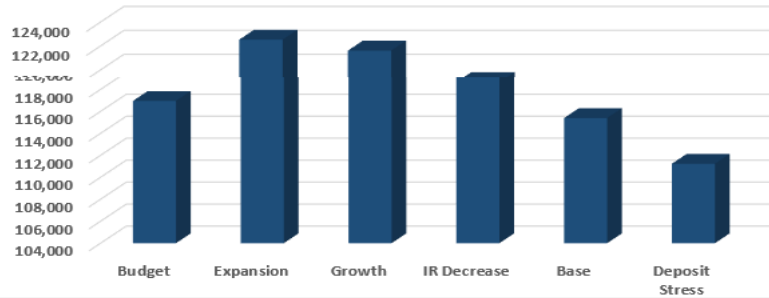
	Worsening	Neutral	Improving
Revenues	Net interest income (NII) will likely be roughly flat to moderately down for many banks with funding costs rising somewhat further in 2024. With a slow-growing economy, fee income may remain tepid in certain areas, such as mortgage banking, but could rebound in others, such as investment banking. Trading revenues may remain relatively robust.		
Expenses	Banks will keep focusing on expenses, consolidating branches, and digitizing. However, inflation and investments in technology will raise expenses further.		
Profitability	Profitability will weaken somewhat with expenses growing moderately and revenues little changed. We think provisions in 2024 won't change materially from 2023 levels. We expect an industry return on common equity of 9%-11%, down from an estimated 12%-13% in 2023.		
Credit quality	While most measures of credit quality remain in good shape, we expect delinquencies and charge-offs to continue rising toward historical averages amid limited economic growth, declining consumer savings, and stress in areas like commercial real estate.		
Capital	Many banks will increase capital ratios further by limiting payouts to support confidence and in anticipation of potentially stricter capital rules. The evolving outlook for the economy will also affect capital planning.		
Funding and liquidity	Deposits will fall moderately further if the Federal Reserve continues quantitatively tightening, increasing competition for and raising the cost of funding. While banks are taking steps to build liquidity, we expect funding and liquidity metrics to weaken gradually.		

WHAT COULD HAPPEN - ES BANK

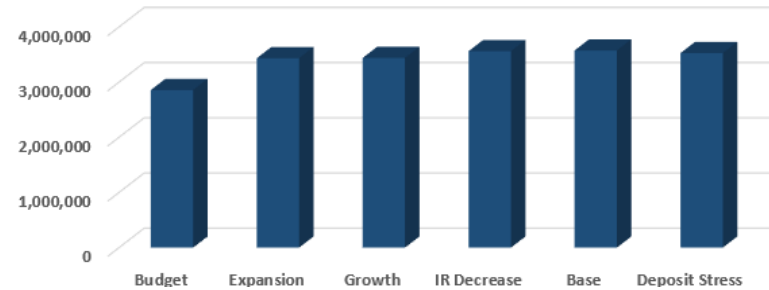
What Could Happen?
(Predictive Analysis)

SCENARIO ANALYSIS: ALM

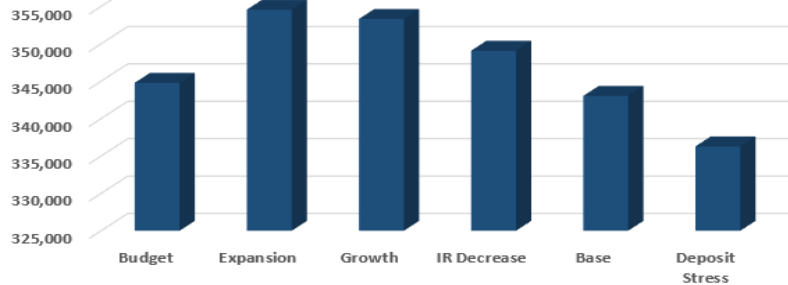
Net Income



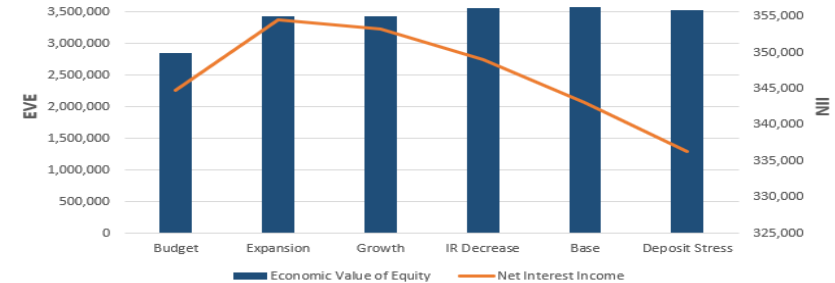
Economic Value of Equity



Net Interest Income



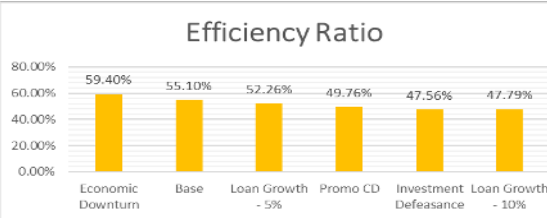
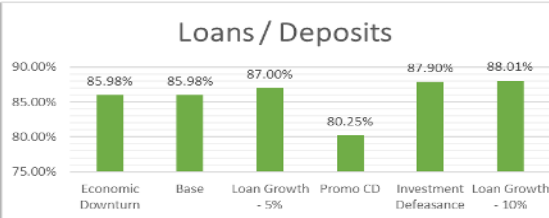
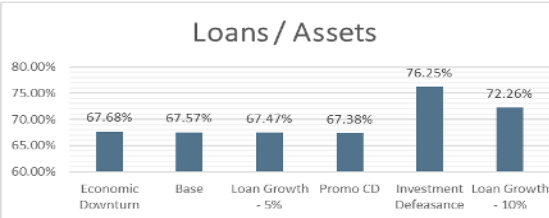
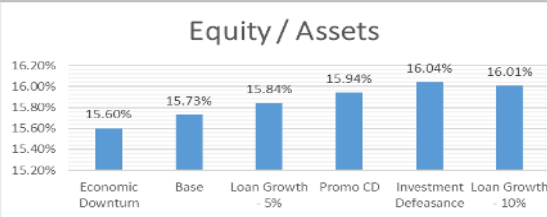
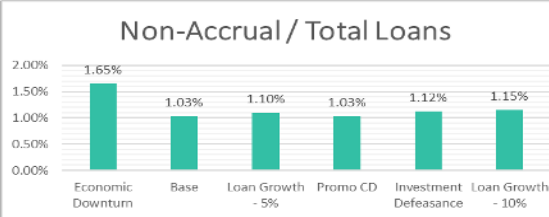
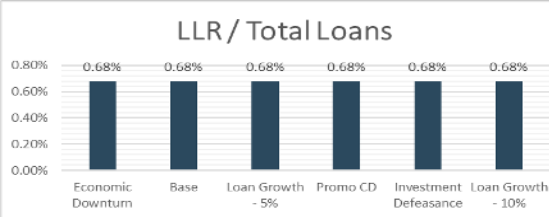
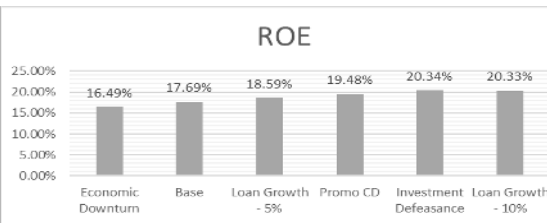
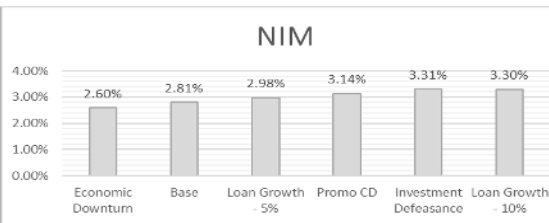
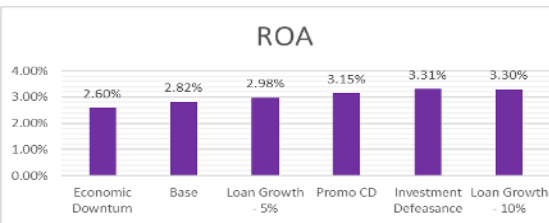
EVE vs NII



WHAT COULD HAPPEN - ES BANK

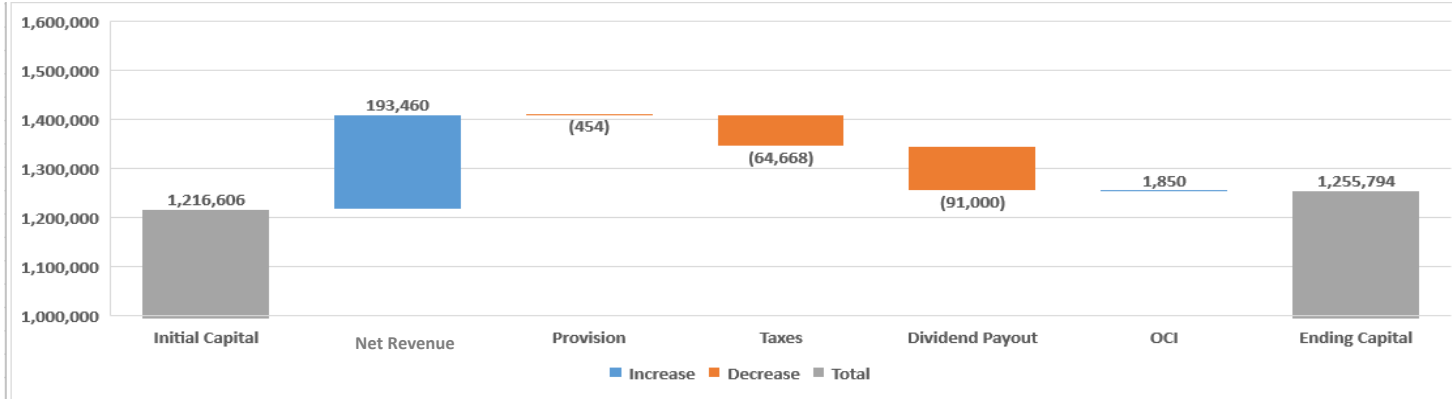
What Could Happen?
(Predictive Analysis)

SCENARIO ANALYSIS: PERFORMANCE METRICS



WHAT COULD HAPPEN – ES BANK

SCENARIO ANALYSIS: CAPITAL IMPACT



Capital Ratios	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Capital Adequacy Ratio	13.1%	13.3%	13.1%	13.3%	13.4%	13.3%	13.4%	13.6%	13.4%	13.5%	13.7%	13.5%
RWA to Total Assets	57.6%	57.5%	57.4%	57.2%	57.1%	56.9%	56.7%	56.6%	56.5%	56.3%	56.2%	56.1%
Tier 1 Capital	819,734	830,941	819,025	829,853	840,684	828,664	839,240	849,941	837,704	848,202	858,642	846,253
Tier 2 Capital	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651
Tier 1 Risk-Based Capital Ratio	12.0%	12.2%	12.0%	12.2%	12.3%	12.2%	12.3%	12.5%	12.3%	12.5%	12.6%	12.4%
Tier 1 Common Ratio	8.6%	8.8%	8.6%	8.8%	8.9%	8.7%	8.9%	9.0%	8.9%	9.0%	9.2%	9.0%
Tier 1 Leverage Ratio	6.9%	7.0%	6.9%	7.0%	7.0%	6.9%	7.0%	7.1%	6.9%	7.0%	7.1%	7.0%
Total Risk-Based Capital Ratio	13.1%	13.3%	13.1%	13.3%	13.4%	13.3%	13.4%	13.6%	13.4%	13.5%	13.7%	13.5%
Total Risk Weighted Assets	6,806,578	6,805,752	6,810,056	6,808,667	6,809,430	6,809,064	6,807,986	6,809,260	6,811,241	6,811,285	6,812,889	6,815,336

WHAT COULD HAPPEN - ES BANK

SCENARIO ANALYSIS: LIQUIDITY ANALYSIS

Liquidity Stress - High Level Summary

As of: September 30, 2018

Scale: Millions

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
Forecast												
Cumulative Sources/Uses	(48)	(94)	(140)	(184)	(222)	(266)	(306)	(344)	(382)	(420)	(456)	(492)
Available Remaining Capacity	5,981	5,896	5,811	5,729	5,658	5,577	5,517	5,484	5,452	5,419	5,389	5,358
Survival Horizon: 12	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Economic Downturn												
Cumulative Sources/Uses	(268)	(521)	(777)	(959)	(1,129)	(1,305)	(1,477)	(1,641)	(1,809)	(1,994)	(2,192)	(2,350)
Available Remaining Capacity	4,489	4,230	3,993	3,824	3,670	3,508	3,348	3,196	3,039	2,865	2,679	2,533
Survival Horizon: 12	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Loan Growth												
Cumulative Sources/Uses	(565)	(945)	(1,309)	(1,591)	(1,863)	(2,134)	(2,389)	(2,640)	(2,882)	(3,121)	(3,349)	(3,573)
Available Remaining Capacity	5,304	4,979	4,667	4,430	4,202	3,974	3,759	3,549	3,345	3,145	2,952	2,764
Survival Horizon: 12	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Worst Case												
Cumulative Sources/Uses	(349)	(672)	(1,001)	(1,250)	(1,480)	(1,716)	(1,946)	(2,164)	(2,388)	(2,639)	(2,912)	(3,118)
Available Remaining Capacity	1,675	1,356	1,031	785	559	325	98	(116)	(338)	(587)	(857)	(1,060)
Survival Horizon: 7	PASS	PASS	PASS	PASS	PASS	PASS	WARNING	FAIL	FAIL	FAIL	FAIL	FAIL
Worst Case Mitigation												
Cumulative Sources/Uses	(349)	(672)	(1,001)	(1,250)	(1,480)	(1,716)	(1,946)	(2,164)	(2,388)	(2,639)	(2,912)	(3,118)
Available Remaining Capacity	1,675	1,356	1,031	785	559	325	98	(116)	(338)	(587)	(857)	(1,060)
Survival Horizon: 7	PASS	PASS	PASS	PASS	PASS	PASS	WARNING	FAIL	FAIL	FAIL	FAIL	FAIL



THE FINANCIAL STORY

CHAPTER 4: WHAT SHOULD HAPPEN?

WHAT SHOULD HAPPEN - ES BANK

PROJECTED FINANCIAL & RISK METRICS

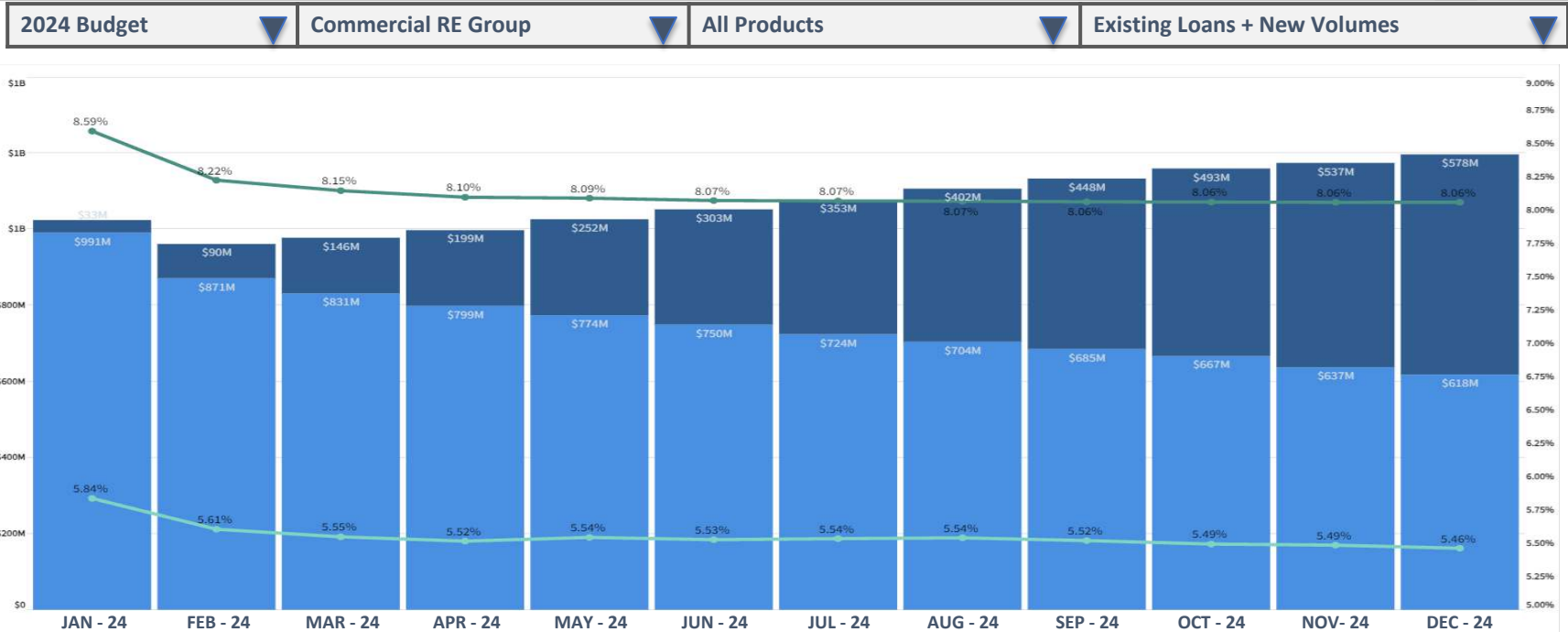
All the previous reports in **WHAT COULD HAPPEN**
(Financials, KPIs, Capital, Risk, etc.)
for the **SHOULD HAPPEN PLAN** you create.

PLUS more detailed reports and analytics
to provide detailed direction for the organization,
for example...

WHAT SHOULD HAPPEN - ES BANK

What Should Happen?
(Prescriptive Analysis)

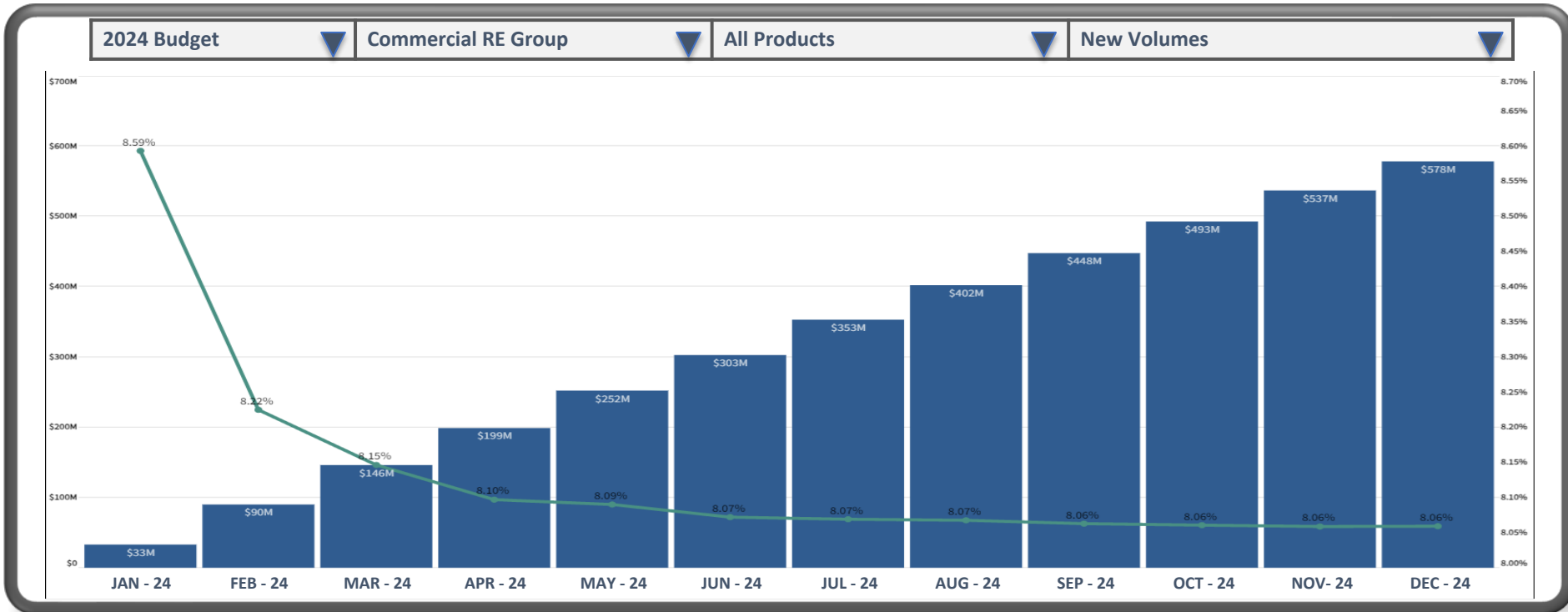
PROJECTED PORTFOLIO GROWTH



WHAT SHOULD HAPPEN - ES BANK

What Should Happen?
(Prescriptive Analysis)

PROJECTED NEW ORIGINATIONS



WHAT SHOULD HAPPEN – ES BANK

What Should Happen?
(Prescriptive Analysis)

PLANNED PROJECTS & FIXED ASSETS NEEDED



EMPYREAN REPORTING

Financial Summary (No, Total Institution, 2023 Budget, January Forecast)

Existing/Margi...	Account Sub-Type	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	2023
Existing	Fixed Assets	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136
Marginal	Fixed Assets		\$27,000	\$122,967	\$119,572	\$128,178	\$124,450	\$120,722	\$116,994	\$113,267	\$109,539	\$105,811	\$102,083	\$102,083
	Depreciation Expense			\$33	\$3,394	\$3,394	\$3,728	\$3,728	\$3,728	\$3,728	\$3,728	\$3,728	\$3,728	\$32,917



EMPYREAN REPORTING

Request List (Existing/Marginal, Total Institution, January Forecast)

Request ID	Status	Fixed Asset Category	Description	Comments	Priority	Department Name	Purchase Date	In Service Date	Deprec Method	Quantity	Purchase Cost	Capitalized Amount	Monthly Depreciation	ROY Depreciation	Planned Horizon Depreciation
39	In Progress	Laptop	Laptops for Loan	All officer laptops are	HIGH	Manhattan Main	2023-05-01	2023-06-01	Straight l	6	\$2,000	\$12,000	\$333	\$0	\$2,333
40	In Progress	Furniture	Loan officer desks for	Part of branch	MEDIUM	Manhattan Main	2023-02-01	2023-03-01	Straight l	4	\$500	\$2,000	\$33	\$0	\$333
41	In Progress	Server	New Kiosks for the	--	HIGH	Manhattan Main	2023-03-01	2023-04-01	Straight l	6	\$6,000	\$36,000	\$1,000	\$0	\$9,000
42	In Progress	Server	New ITM machines	--	HIGH	Manhattan Main	2023-03-01	2023-04-01	Straight l	4	\$15,000	\$60,000	\$1,667	\$0	\$15,000
43	In Progress	Server	Rewire entire branch	--	CRITICAL	Manhattan Main	2023-02-01	2023-04-01	Straight l	1	\$25,000	\$25,000	\$694	\$0	\$6,250
										21	\$48,500	\$135,000	\$3,728	\$0	\$32,917

WHAT SHOULD HAPPEN - ES BANK

PAYROLL & PERSONNEL PLAN

2024 Final BUDGET | Payroll & Personnel Plan

Financial Year 2024

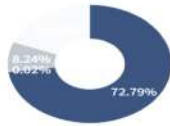
Departments:

Current	
Current FTE	645.23
Current Salary	\$17,353,984
Current Head Count	400
Existing	
Existing Employee Target Increase (%)	4.00%
Existing Employee Target Increase (\$)	\$18,048,143

Planned	
Planned FTE	647.23
Planned Salary	\$18,010,300
Planned Head Count	402
Existing	
Existing Employee Planned Salary Increase (%)	0.03%
Existing Employee Planned Salary Increase (\$)	\$17,874,603

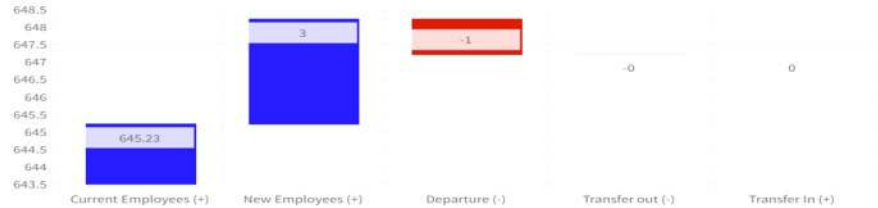
Variance	
FTE	2
Salary	\$656,316
Head Count	2
Total Change (Existing, New, Departures)	3.78%
Existing	
Above/Below Target (Existing)	-0.01%
Existing Employee Salaries	-\$173,540

Planned Payroll



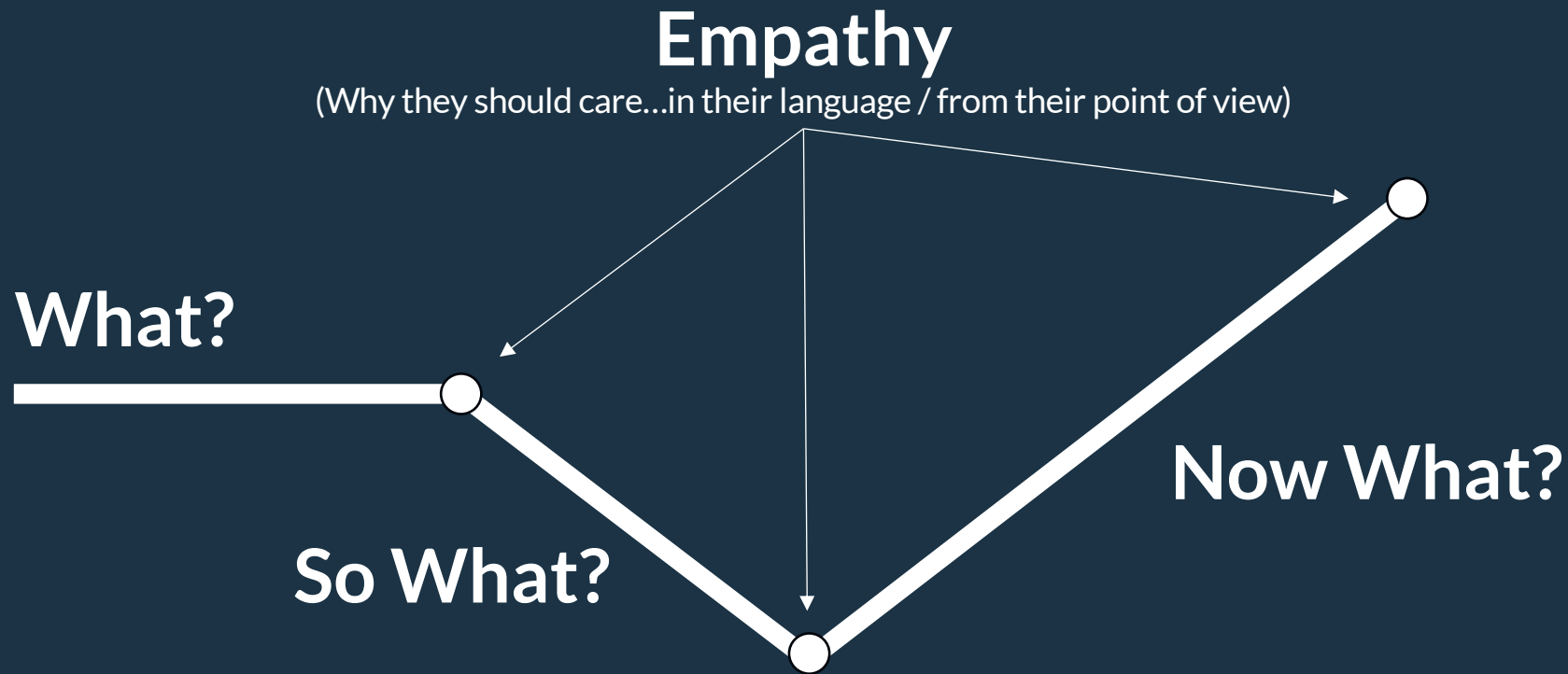
— Salary — Bonus — Benefits — Taxes

FTE WaterFall



Employee Waterfall	Planned FTE Count	Planned Head Count	Salary	Bonus	Bonus %	Total Compensation	Benefits	Taxes	Total Comp Included Benefits And Taxes
Planned Employees	647	402	18,010,300	5,600	0.0 %	18,015,900	2,039,163	4,686,213	24,741,277
Current Employees	645	400	17,353,984	-	0.0 %	17,353,984	2,035,158	4,676,681	24,065,823
New Employees	3	3	163,200	5,600	3.0 %	168,800	5,722	13,451	187,973
Departures	1	1	(27,503)	-	0.0 %	(27,503)	-	(3,919)	(33,138)
Transfers Out	-	-	-	-	0.0 %	-	-	-	-
Transfers In	-	-	-	-	0.0 %	-	-	-	-

TELLING THE FINANCIAL STORY





THE FINANCIAL STORY

ADDITIONAL BEST PRACTICES

KEY TAKEAWAYS

FINAL THOUGHT

Q&A

ADDITIONAL BEST PRACTICES

Additional Considerations to Most Effectively Tell Your Financial Story



CONSIDER ALL DATA SOURCES

Market, Financial, Operational, Transaction, Peer, Regulatory and Internal Benchmarks, etc.



KNOW YOUR DATA

Research, partner with other teams, educate and train your team



KNOW YOUR AUDIENCE

Level of Detail, Visualizations, Use Analogies, Tailor to each Group



FOCUS ON WHAT'S RELEVANT

Unique to each institution, to each team, understand drivers of performance



RIGHT SYSTEMS, TOOLS, PEOPLE

Do you have the right data, reporting, analysis, risk, etc. tools and corresponding people knowledge?



PROPOSE A PLAN

Focus on the potential and best way forward and the potential impact

COMMUNICATING THE MESSAGE

Know Your Audience

Who?

- Who are the consumers?

"C" LEVEL

MANAGERS

FINANCE

FRONT-LINE

What?

- What information do they need

- To support What decisions

Higher Level KPI's and Dashboards

Consolidated Results, Outliers, & Explanations

Reports; Interactive (direct access)

Specific Data & Analytics to support real-time decisions

How?

- How should it be presented

- How much time do they have

- Are they finance oriented?

Mobile, Dashboards

Dashboards, Reports, Interactive (direct access and distributed)

Detailed Reporting & Drill Thru Analysis

Real-time access

KEY TAKEAWAYS

THE ROLE OF FINANCE / CFO HAS CHANGED

CHIEF STORYTELLER & STRATEGIC PARTNER

- *What Happened?*
- *Why did it Happen?*
- *What Could Happen?*
- *What Should Happen?*

ADDITIONAL “STORY TELLING” BEST PRACTICES

FINAL THOUGHT

The time, money and effort you spend creating data and information; AND creating, distributing and analyzing “reports” should have one end goal:

TO SUPPORT BETTER DECISION MAKING!



“So What?”

THANK YOU!

Ken Levey

email: kenneth.levey@empyreansolutions.com

Bryan Ridgway

email: bryan.ridgway@empyreansolutions.com



Booth # 3



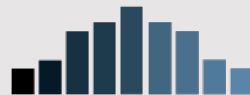
304 Cambridge Rd, Suite 210
Woburn, MA , 01801



empyreansolutions.com



Empyrean Solutions



EMPYREAN
SOLUTIONS

APPENDIX

Telling the Financial Story

Examples



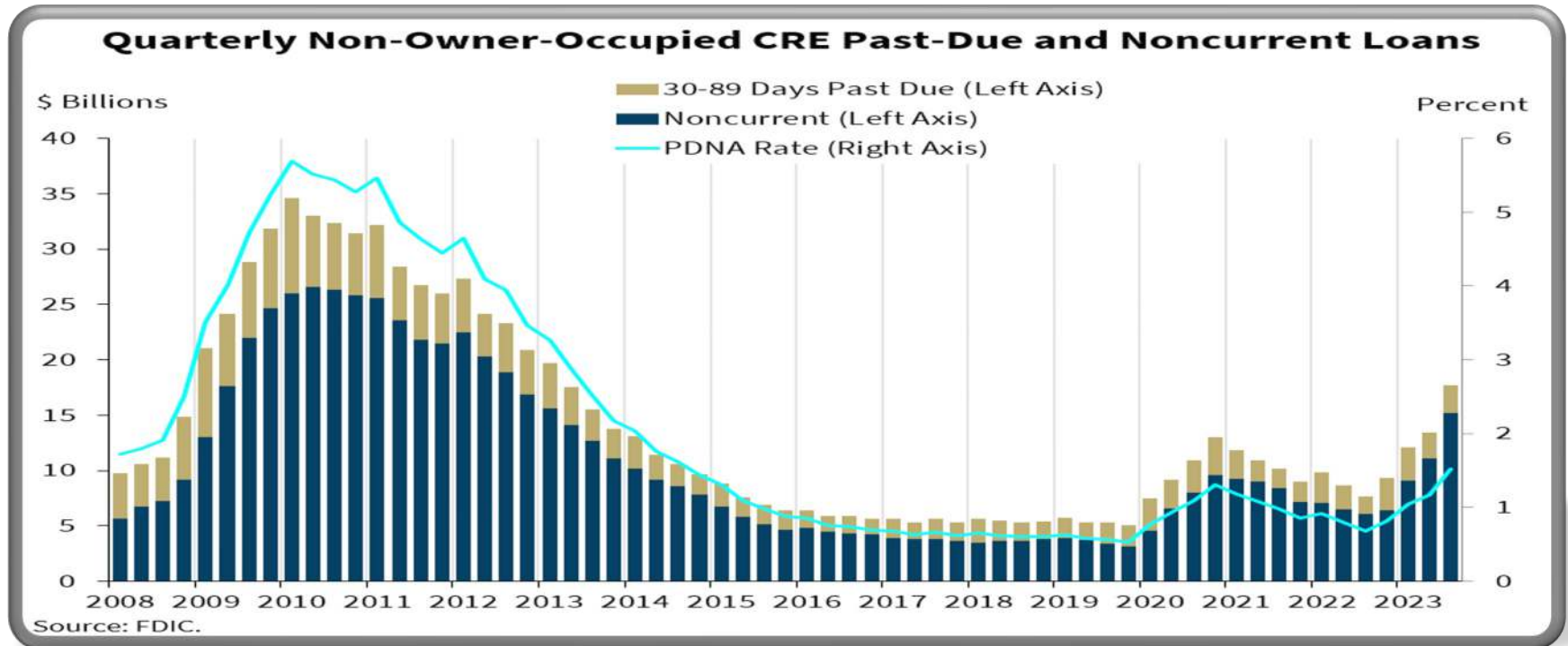


THE FINANCIAL STORY

CHAPTER 1: WHAT HAPPENED?

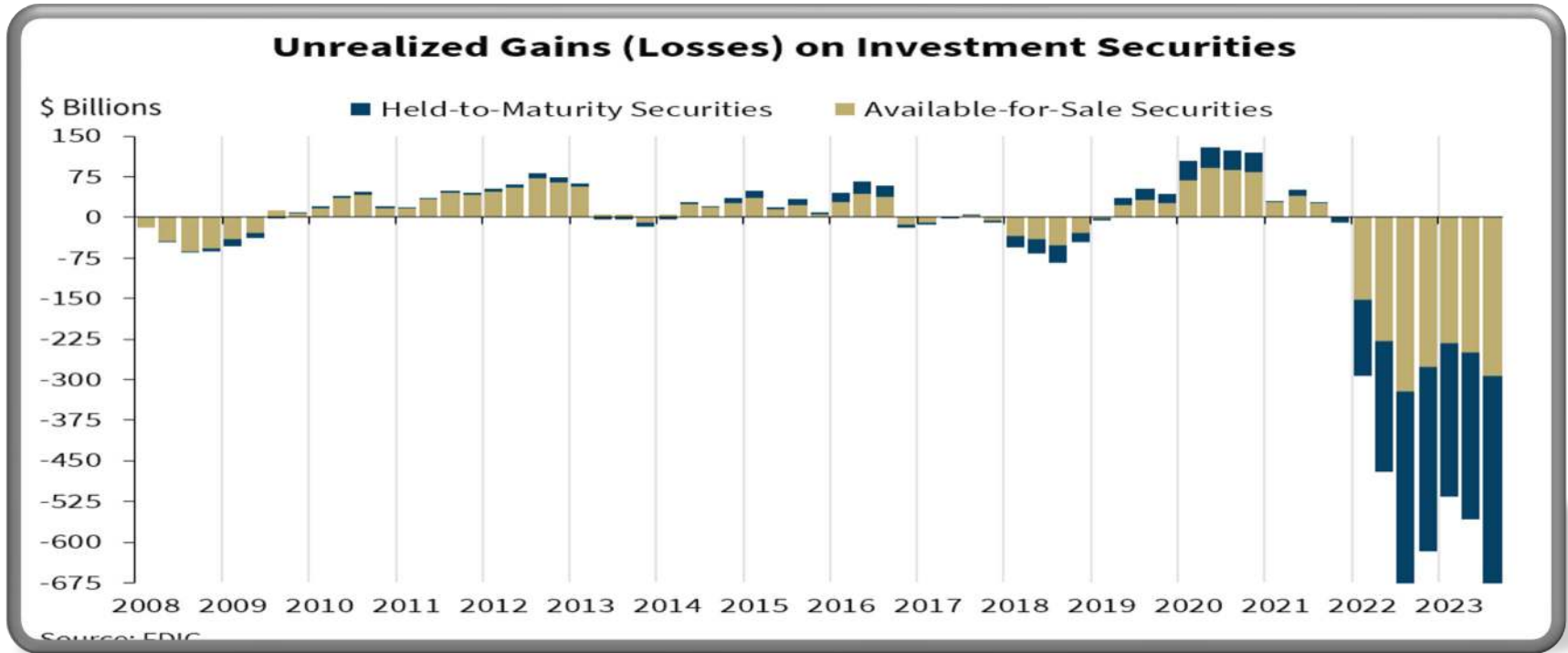
WHAT HAPPENED - MARKET

CRE PAST DUES & NON-CURRENT LOANS INCREASING



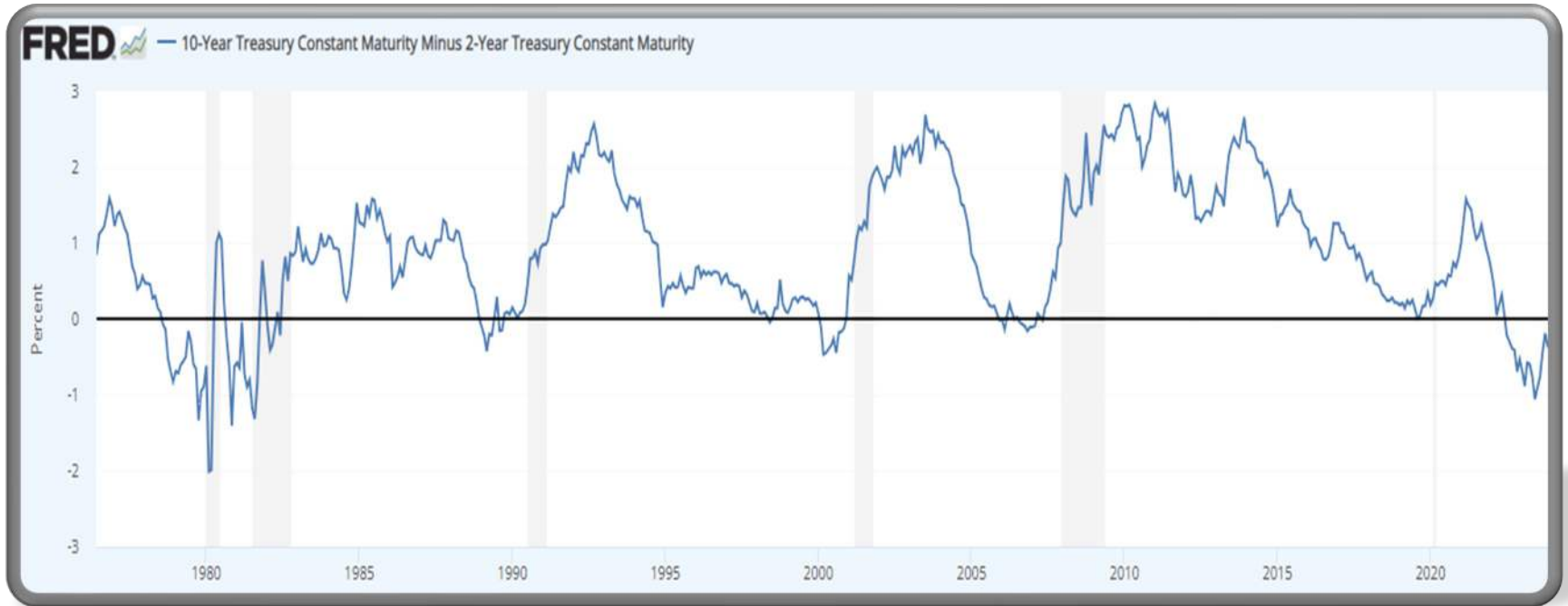
WHAT HAPPENED - MARKET

CONTINUED UNREALIZED LOSSES ON INVESTMENTS



WHAT HAPPENED - MARKET

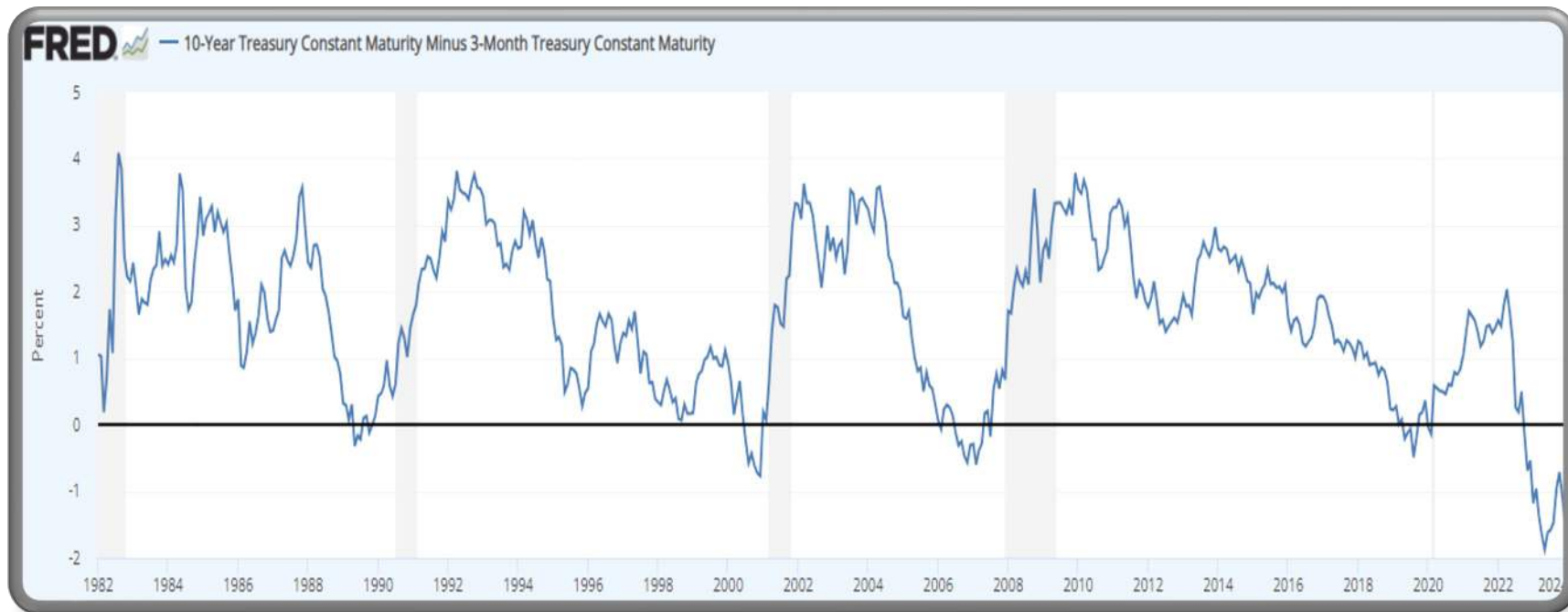
CONTINUED YIELD CURVE INVERSION (10yr – 2yr Spread)



WHAT HAPPENED - MARKET

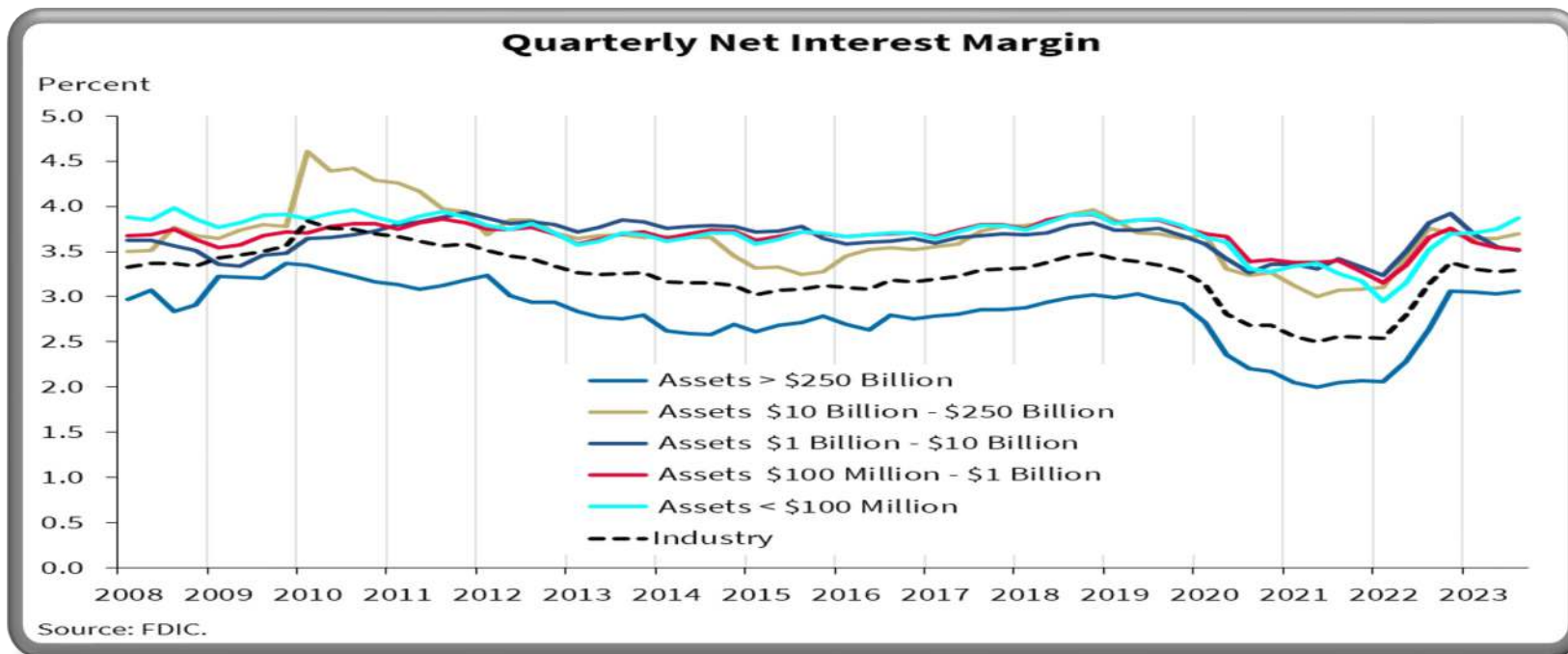
What Happened?
(Descriptive Analysis)

CONTINUED YIELD CURVE INVERSION (10yr – 3mo Spread)



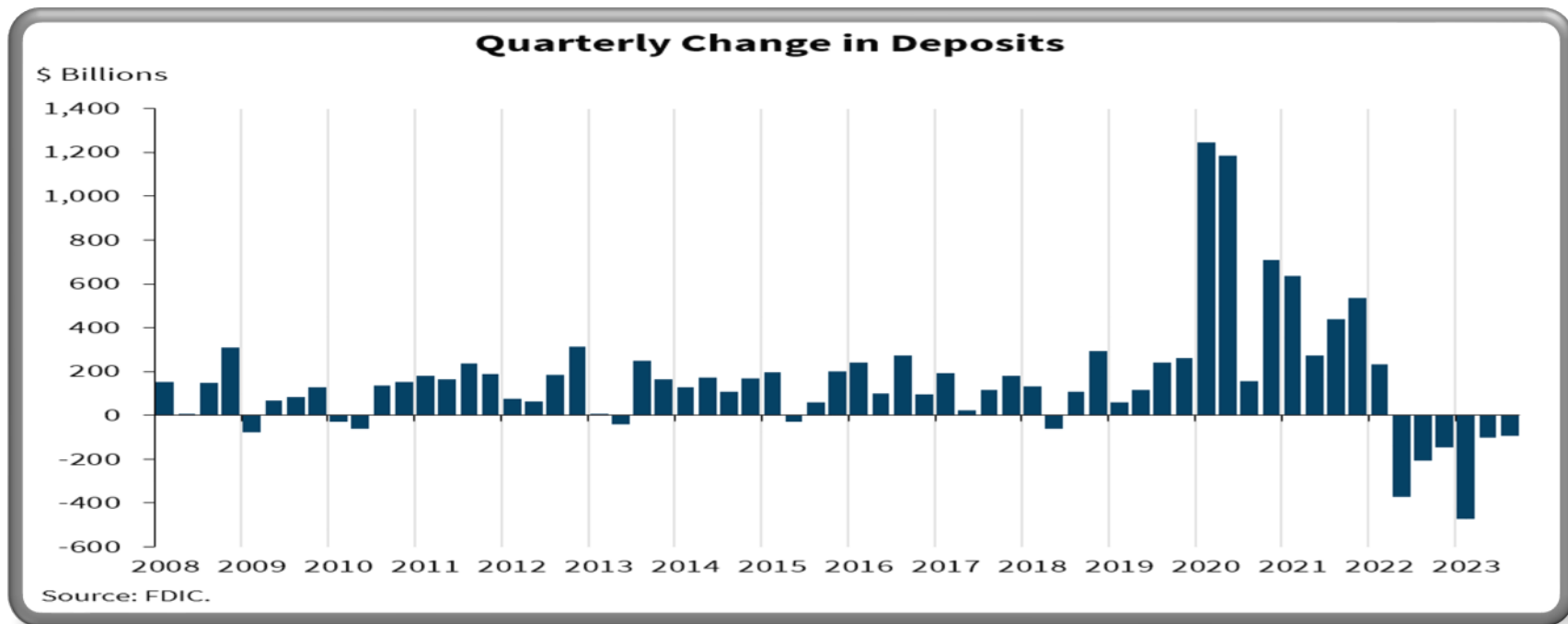
WHAT HAPPENED - MARKET

MARGINS SLIGHTLY REVERSED DOWNWARD TREND



WHAT HAPPENED - MARKET

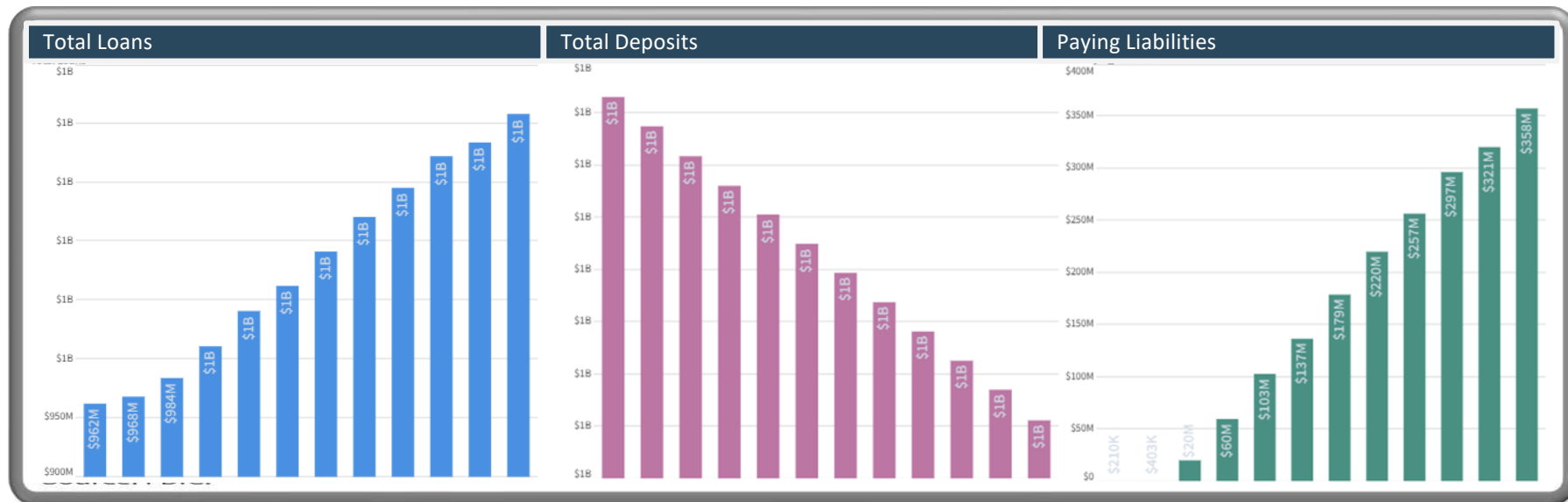
DEPOSITS DECLINED FOR A 6TH CONSECUTIVE QUARTER



WHAT HAPPENED – ES BANK

What Happened?
(Descriptive Analysis)

BALANCE SHEET TRENDS



LOAN GROWTH

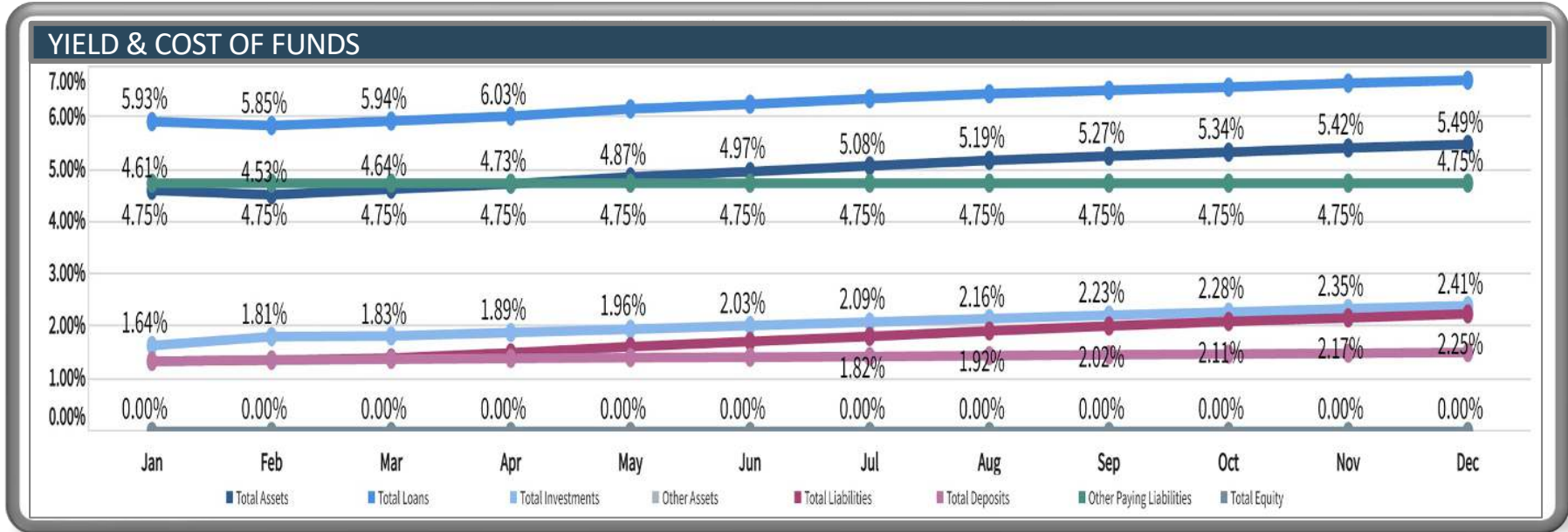
DEPOSIT RUNOFF

INCREASED BORROWINGS

WHAT HAPPENED – ES BANK

What Happened?
(Descriptive Analysis)

RATE TRENDS



LOAN YIELDS ↑

DEPOSIT COSTS ↑

BORROWING RATES ↑

WHAT HAPPENED – ES BANK

What Happened?
(Descriptive Analysis)



EARNINGS:

INTEREST INCOME ↑

INTEREST EXPENSE ↑

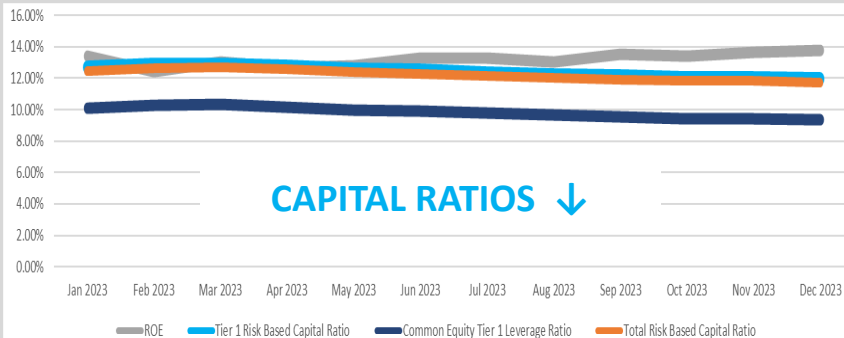
NON-INTEREST EXPENSE ↑

NIAT ↑

WHAT HAPPENED – ES BANK

What Happened?
(Descriptive Analysis)

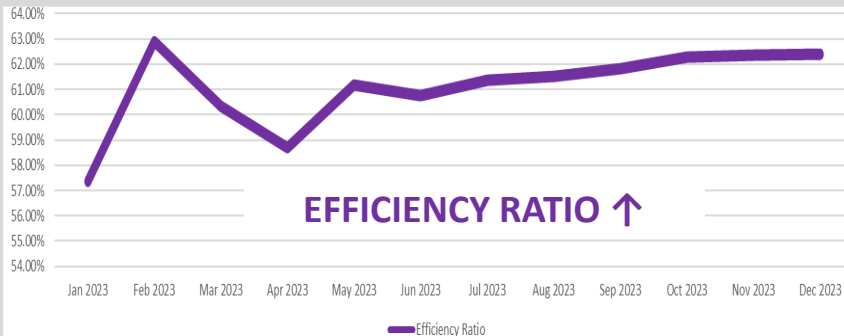
Capital Ratios



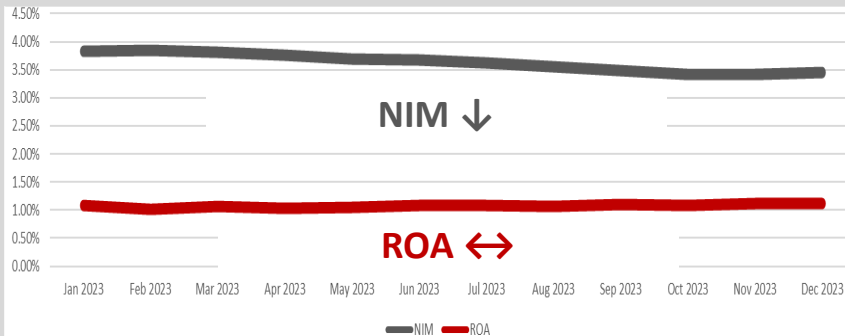
Loans-to-Deposits



Efficiency Ratio



NIM and ROA



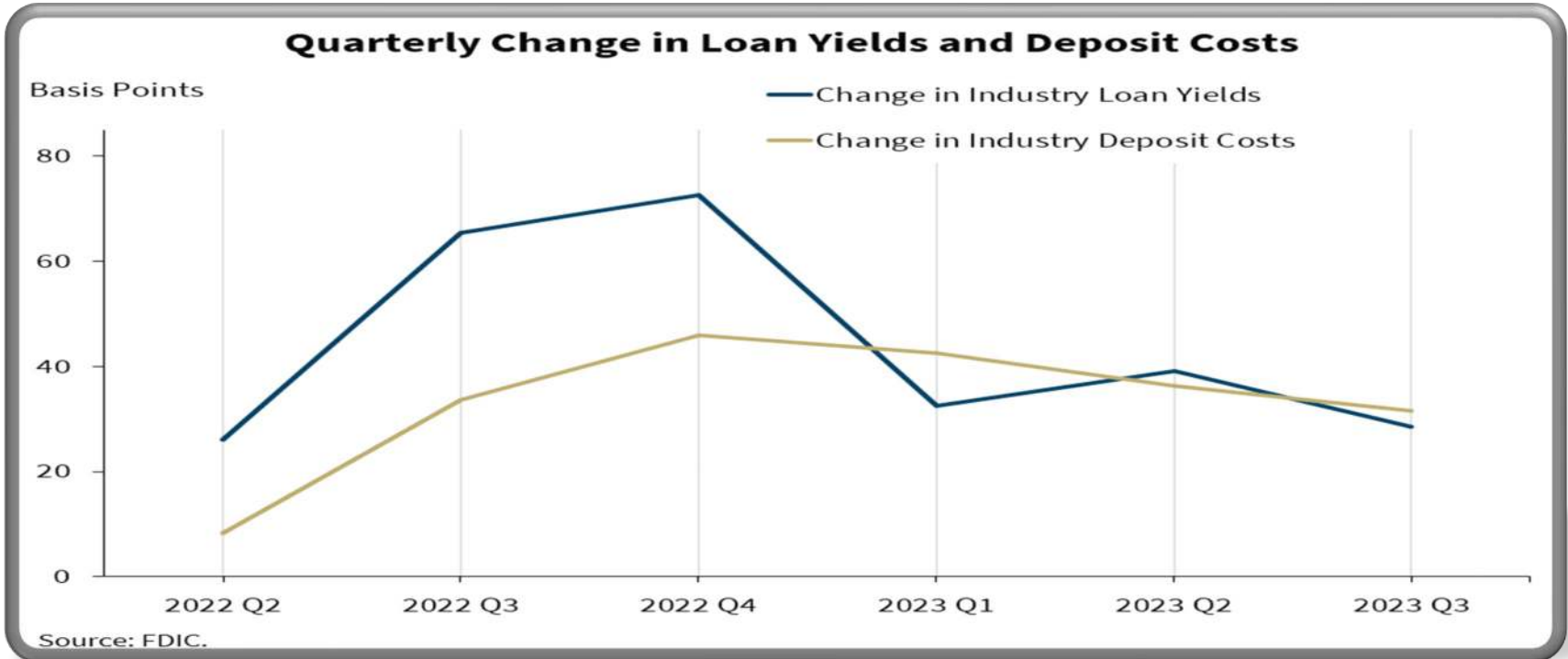


THE FINANCIAL STORY

CHAPTER 2: WHY DID IT HAPPEN?

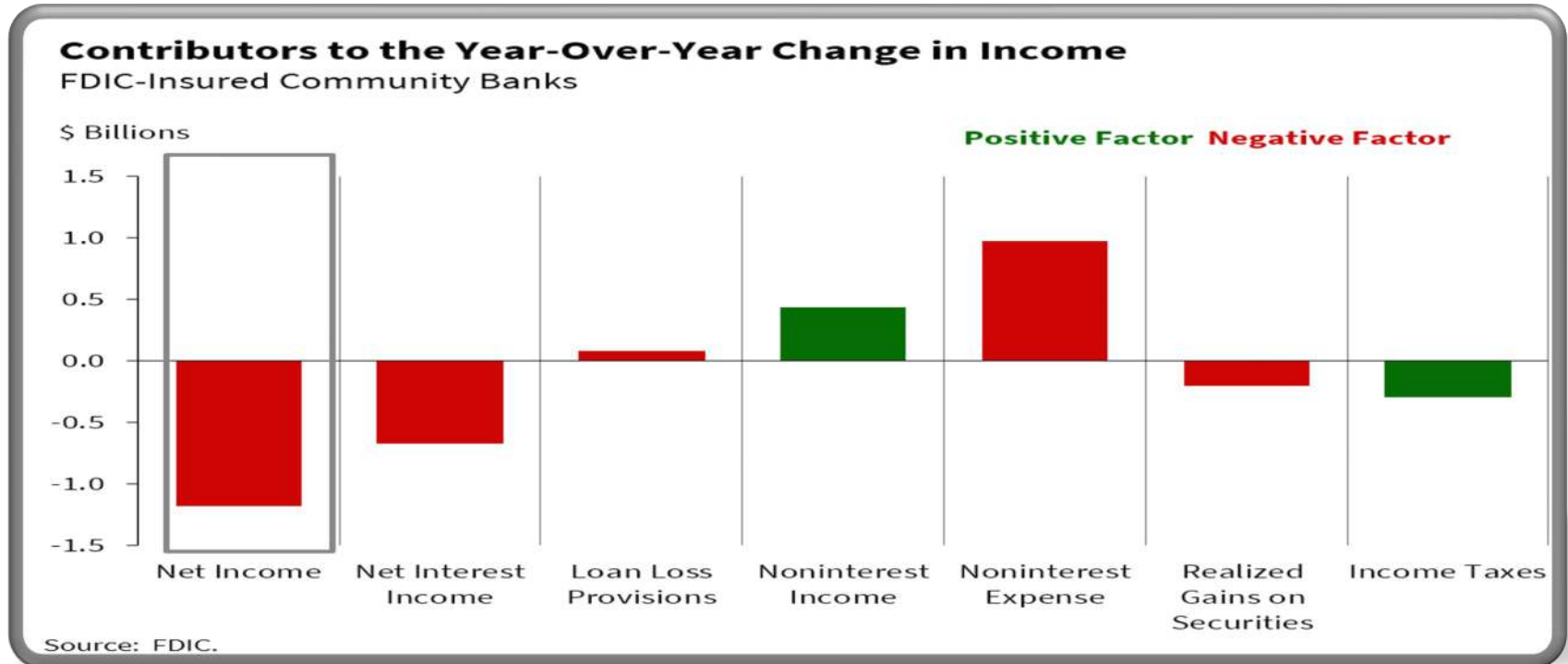
WHY DID IT HAPPEN - MARKET

CHANGE IN DEPOSIT COSTS & LOAN YIELDS HAVE INVERTED



WHY DID IT HAPPEN - MARKET

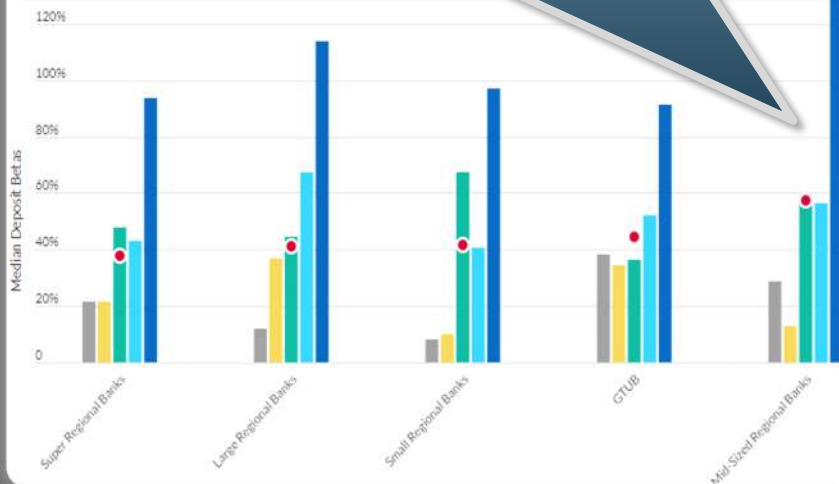
NET INCOME DECREASE: Driven by ↓ Net Int Inc. & ↑ Non-Int Exp.



WHY DID IT HAPPEN - MARKET

DEPOSITS: UNDERSTANDING THE CHANGE

Deposit Betas Nearly Doubled



\$ in billions	Dec-22	Mar-23	Jun-23	9/20/2023	9/20/23 vs Dec-22
Deposits - Large Banks*	10,866	10,884	10,837	10,774	-0.8%
Deposits - Small Banks	5,358	5,206	5,208	5,280	-1.5%
Deposits - All Banks	16,442	16,090	16,045	16,054	-2.4%

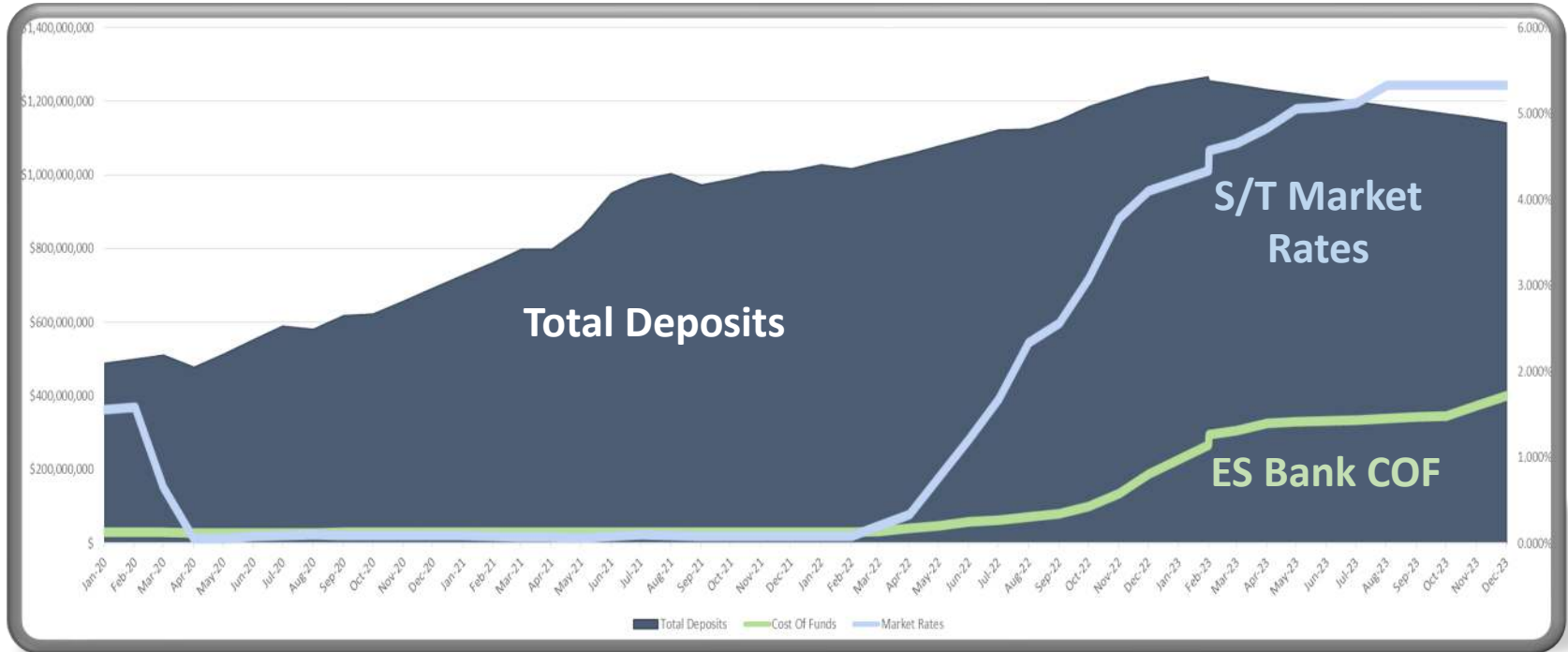
LTD Ratios Increased 1% – 5%

LTD Ratio - Large Banks*	62%	62%	62%	63%	
LTD Ratio - Small Banks	79%	83%	83%	84%	
LTD Ratio - All Banks	67%	69%	69%	70%	
Borrowings - Large Banks*	598	861	875	876	46.5%
Borrowings - Small Banks	384	569	487	435	13.3%
Borrowings - All Banks	983	1,430	1,362	1,312	33.5%

WHY DID IT HAPPEN - ES BANK

Why Did it Happen?
(Diagnostic Analysis)

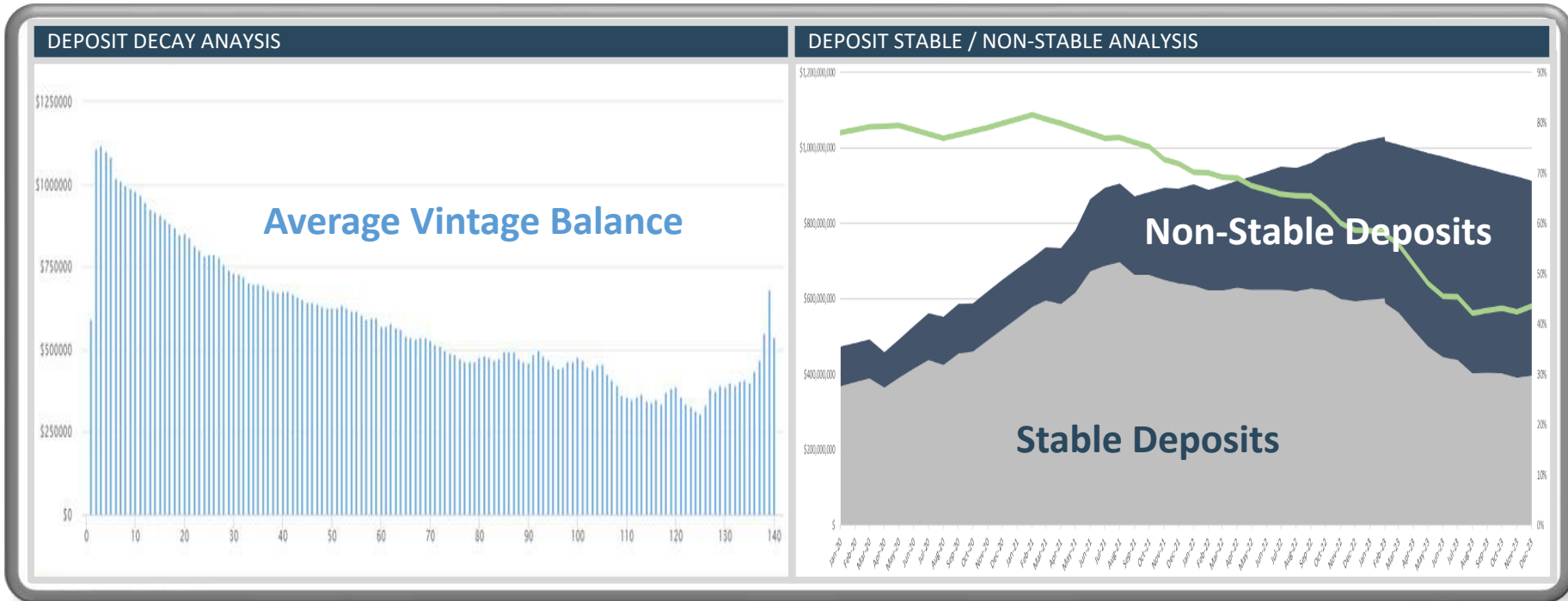
DEPOSIT BETA ANALYSIS: DEPOSIT RUNOFF; INCREASED RATE SENSITIVITY



WHY DID IT HAPPEN - ES BANK

Why Did it Happen?
(Diagnostic Analysis)

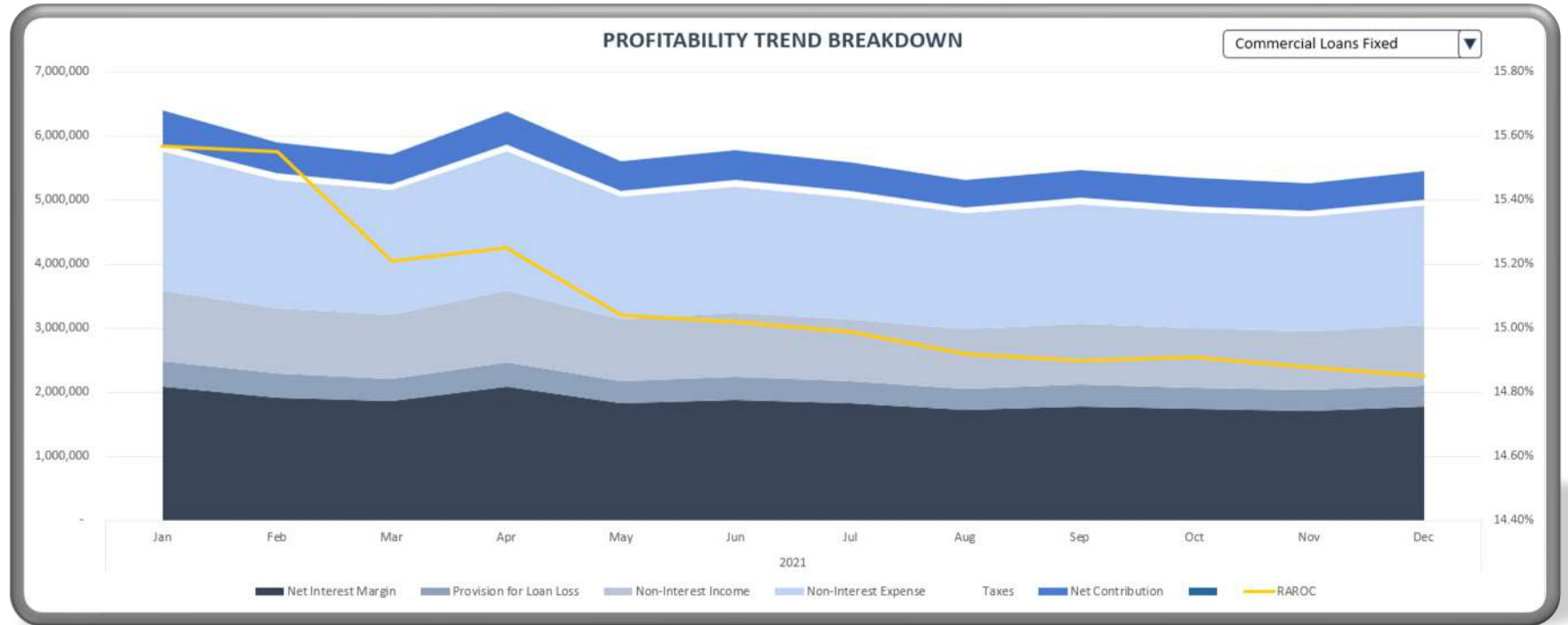
DEPOSIT DECAY and STABLE / NON-STABLE DEPOSIT ANALYSIS



WHY DID IT HAPPEN - ES BANK

Why Did it Happen?
(Diagnostic Analysis)

PROFITABILITY ANALYSIS



WHY DID IT HAPPEN - ES BANK

Why Did it Happen?
(Diagnostic Analysis)

PROFITABILITY ANALYSIS

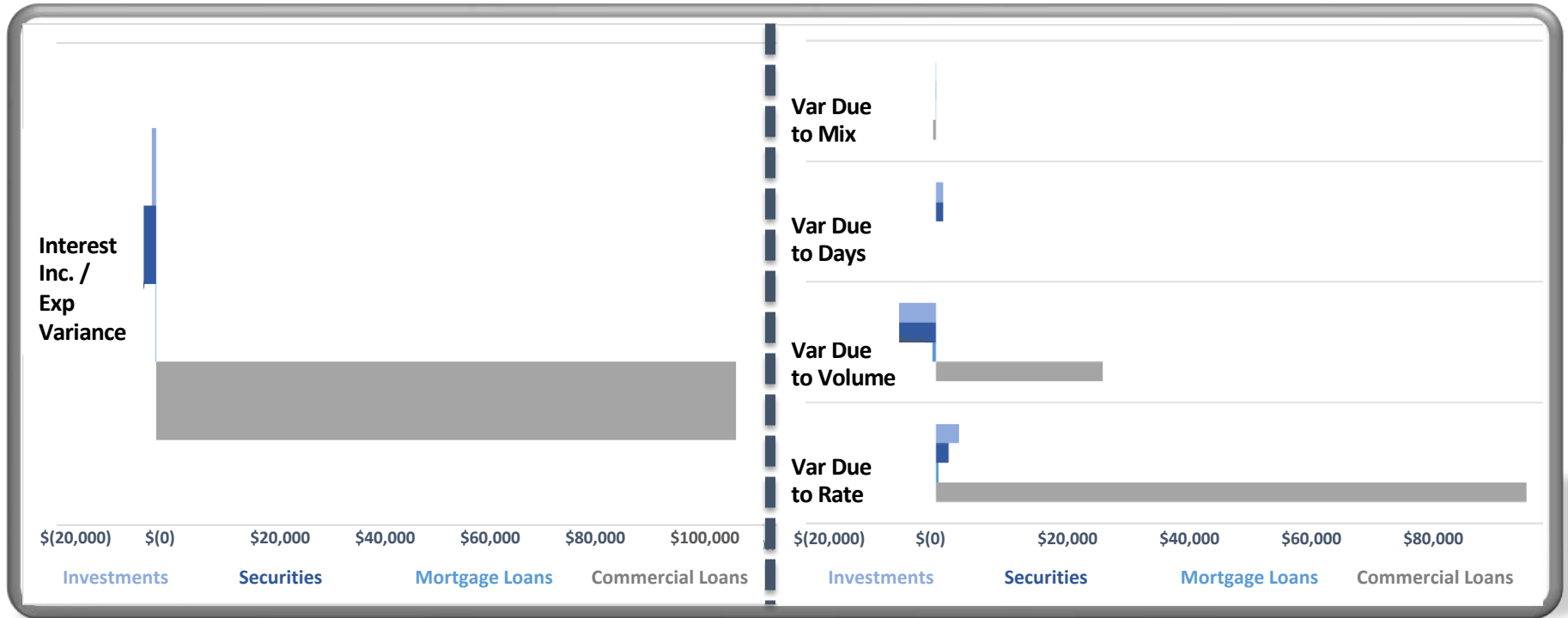
PROFITABILITY TREND BREAKDOWN

Commercial Loans Fixed	2022						2023						Total	
	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Dec
Net Interest Margin	25,007,650	2,087,444	1,927,673	1,866,891	2,085,707	1,829,379	1,887,730	1,826,948	1,736,642	1,788,742	1,745,326	1,719,276	1,780,058	22,281,816
Interest Income	272,055,111	22,709,045	20,970,915	20,309,670	22,690,152	19,901,587	20,536,382	19,875,137	18,892,716	19,459,498	18,987,180	18,703,789	19,365,034	242,401,104
FTP Charge	247,047,461	20,621,601	19,043,242	18,442,779	20,604,445	18,072,208	18,648,652	18,048,190	17,156,074	17,670,756	17,241,854	16,984,513	17,584,976	220,119,288
Provision for Loan Loss	4,727,433	394,609	364,406	352,916	394,281	345,825	356,856	345,365	328,294	338,143	329,935	325,011	336,501	4,212,143
Non-Interest Income	13,304,255	1,110,536	1,025,536	993,200	1,109,612	973,243	1,004,286	971,950	923,907	951,624	928,526	914,668	947,004	11,854,091
Non-Interest Expense	26,042,905	2,173,859	2,007,474	1,944,175	2,172,051	1,905,111	1,965,878	1,902,579	1,808,535	1,862,791	1,817,578	1,790,450	1,853,748	23,204,229
Direct Expenses	20,313,466	1,695,610	1,565,830	1,516,457	1,694,200	1,485,986	1,533,385	1,484,012	1,410,657	1,452,977	1,417,711	1,396,551	1,445,924	18,099,298
Indirect Expenses	5,729,439	478,249	441,644	427,719	477,851	419,124	432,493	418,567	397,878	409,814	399,867	393,899	407,825	5,104,930
Taxes	1,291,566	107,810	99,558	96,419	107,720	94,482	97,495	94,356	89,692	92,383	90,141	88,795	91,934	1,150,786
Net Contribution	6,250,000	521,701	481,771	466,580	521,267	457,205	471,788	456,597	434,028	447,049	436,198	429,687	444,878	5,568,750
Capital	980,000	81,229	74,915	70,967	79,493	68,764	70,863	68,444	64,757	66,610	65,037	63,937	66,064	841,081
RAROC	15.68%	15.57%	15.55%	15.21%	15.25%	15.04%	15.02%	14.99%	14.92%	14.90%	14.91%	14.88%	14.85%	15.10%

ROOT CAUSE: MARGIN COMPRESSION

WHY DID IT HAPPEN - ES BANK

RATE VOLUME ANALYSIS





THE FINANCIAL STORY

CHAPTER 3: WHAT COULD HAPPEN?

WHAT COULD HAPPEN – MARKET

What Could Happen?
(Predictive Analysis)

U.S. BANK FORECAST

U.S. Forecast : Banks Generate Reasonable Profits Despite Funding Pressure

S&P Global
Ratings

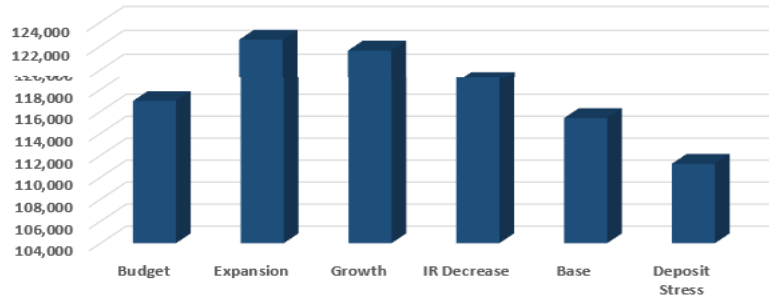
	Worsening	Neutral	Improving
Revenues	Net interest income (NII) will likely be roughly flat to moderately down for many banks with funding costs rising somewhat further in 2024. With a slow-growing economy, fee income may remain tepid in certain areas, such as mortgage banking, but could rebound in others, such as investment banking. Trading revenues may remain relatively robust.		
Expenses	Banks will keep focusing on expenses, consolidating branches, and digitizing. However, inflation and investments in technology will raise expenses further.		
Profitability	Profitability will weaken somewhat with expenses growing moderately and revenues little changed. We think provisions in 2024 won't change materially from 2023 levels. We expect an industry return on common equity of 9%-11%, down from an estimated 12%-13% in 2023.		
Credit quality	While most measures of credit quality remain in good shape, we expect delinquencies and charge-offs to continue rising toward historical averages amid limited economic growth, declining consumer savings, and stress in areas like commercial real estate.		
Capital	Many banks will increase capital ratios further by limiting payouts to support confidence and in anticipation of potentially stricter capital rules. The evolving outlook for the economy will also affect capital planning.		
Funding and liquidity	Deposits will fall moderately further if the Federal Reserve continues quantitatively tightening, increasing competition for and raising the cost of funding. While banks are taking steps to build liquidity, we expect funding and liquidity metrics to weaken gradually.		

WHAT COULD HAPPEN - ES BANK

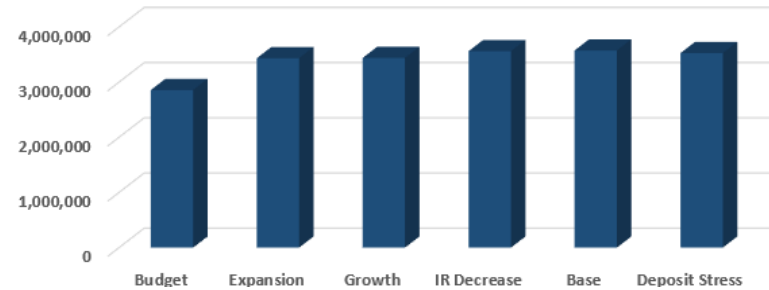
What Could Happen?
(Predictive Analysis)

SCENARIO ANALYSIS: ALM

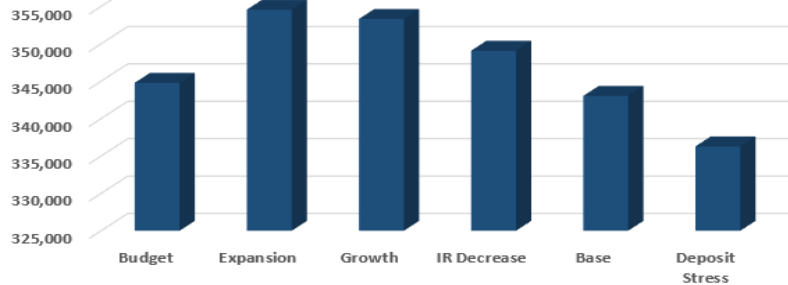
Net Income



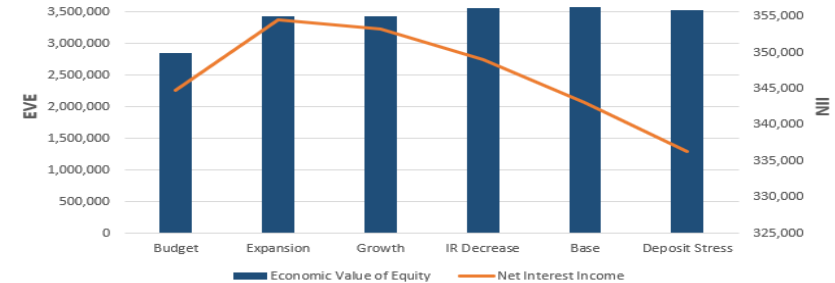
Economic Value of Equity



Net Interest Income



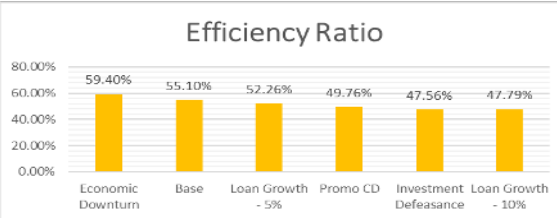
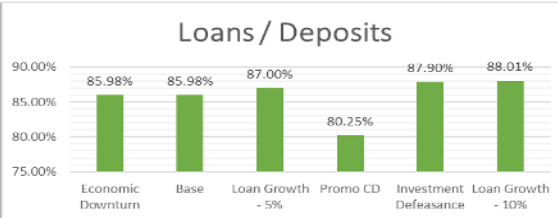
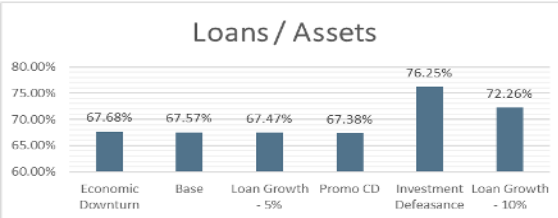
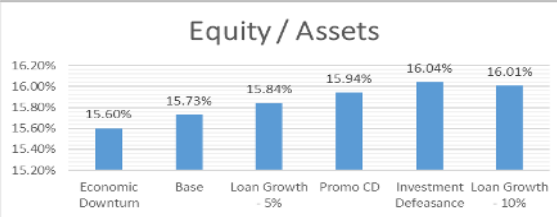
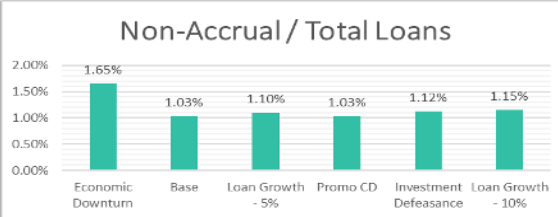
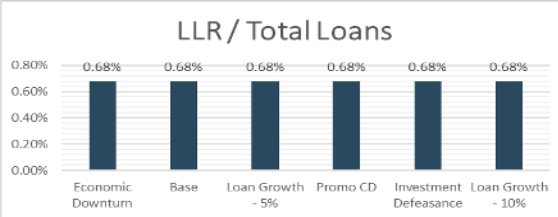
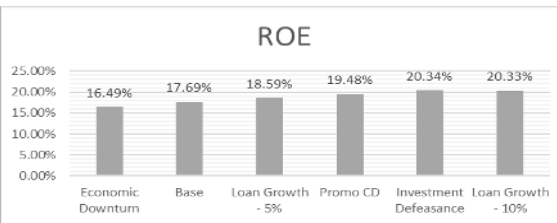
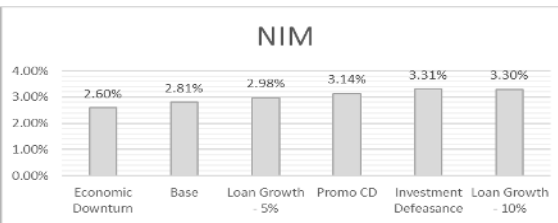
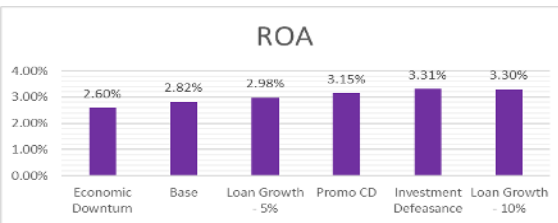
EVE vs NII



WHAT COULD HAPPEN - ES BANK

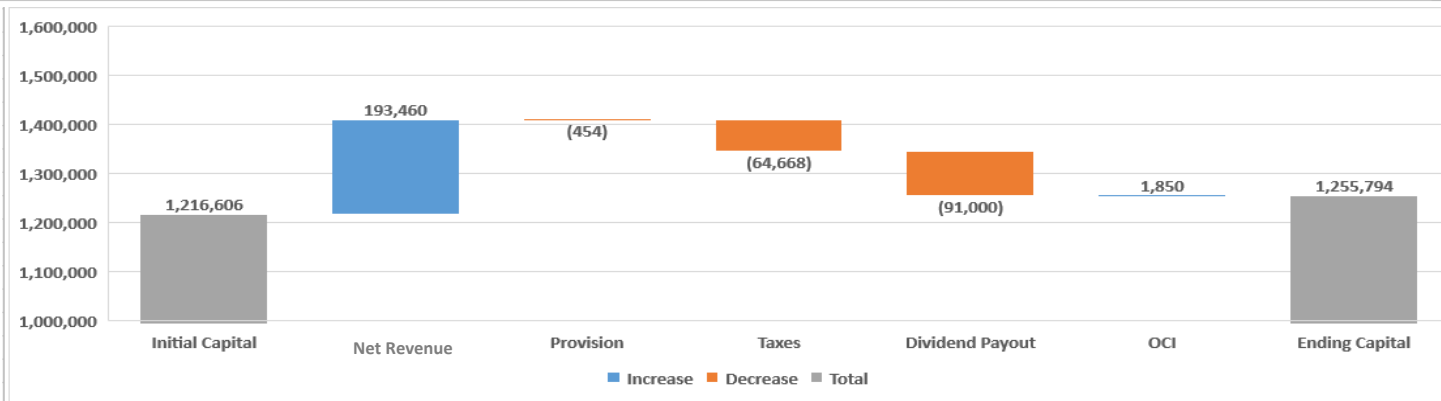
What Could Happen?
(Predictive Analysis)

SCENARIO ANALYSIS: PERFORMANCE METRICS



WHAT COULD HAPPEN – ES BANK

SCENARIO ANALYSIS: CAPITAL IMPACT



Capital Ratios	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Capital Adequacy Ratio	13.1%	13.3%	13.1%	13.3%	13.4%	13.3%	13.4%	13.6%	13.4%	13.5%	13.7%	13.5%
RWA to Total Assets	57.6%	57.5%	57.4%	57.2%	57.1%	56.9%	56.7%	56.6%	56.5%	56.3%	56.2%	56.1%
Tier 1 Capital	819,734	830,941	819,025	829,853	840,684	828,664	839,240	849,941	837,704	848,202	858,642	846,253
Tier 2 Capital	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651	74,651
Tier 1 Risk-Based Capital Ratio	12.0%	12.2%	12.0%	12.2%	12.3%	12.2%	12.3%	12.5%	12.3%	12.5%	12.6%	12.4%
Tier 1 Common Ratio	8.6%	8.8%	8.6%	8.8%	8.9%	8.7%	8.9%	9.0%	8.9%	9.0%	9.2%	9.0%
Tier 1 Leverage Ratio	6.9%	7.0%	6.9%	7.0%	7.0%	6.9%	7.0%	7.1%	6.9%	7.0%	7.1%	7.0%
Total Risk-Based Capital Ratio	13.1%	13.3%	13.1%	13.3%	13.4%	13.3%	13.4%	13.6%	13.4%	13.5%	13.7%	13.5%
Total Risk Weighted Assets	6,806,578	6,805,752	6,810,056	6,808,667	6,809,430	6,809,064	6,807,986	6,809,260	6,811,241	6,811,285	6,812,889	6,815,336

WHAT COULD HAPPEN - ES BANK

SCENARIO ANALYSIS: LIQUIDITY ANALYSIS

Liquidity Stress - High Level Summary

As of: September 30, 2018

Scale: Millions

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
Forecast												
Cumulative Sources/Uses	(48)	(94)	(140)	(184)	(222)	(266)	(306)	(344)	(382)	(420)	(456)	(492)
Available Remaining Capacity	5,981	5,896	5,811	5,729	5,658	5,577	5,517	5,484	5,452	5,419	5,389	5,358
Survival Horizon: 12	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Economic Downturn												
Cumulative Sources/Uses	(268)	(521)	(777)	(959)	(1,129)	(1,305)	(1,477)	(1,641)	(1,809)	(1,994)	(2,192)	(2,350)
Available Remaining Capacity	4,489	4,230	3,993	3,824	3,670	3,508	3,348	3,196	3,039	2,865	2,679	2,533
Survival Horizon: 12	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Loan Growth												
Cumulative Sources/Uses	(565)	(945)	(1,309)	(1,591)	(1,863)	(2,134)	(2,389)	(2,640)	(2,882)	(3,121)	(3,349)	(3,573)
Available Remaining Capacity	5,304	4,979	4,667	4,430	4,202	3,974	3,759	3,549	3,345	3,145	2,952	2,764
Survival Horizon: 12	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Worst Case												
Cumulative Sources/Uses	(349)	(672)	(1,001)	(1,250)	(1,480)	(1,716)	(1,946)	(2,164)	(2,388)	(2,639)	(2,912)	(3,118)
Available Remaining Capacity	1,675	1,356	1,031	785	559	325	98	(116)	(338)	(587)	(857)	(1,060)
Survival Horizon: 7	PASS	PASS	PASS	PASS	PASS	PASS	WARNING	FAIL	FAIL	FAIL	FAIL	FAIL
Worst Case Mitigation												
Cumulative Sources/Uses	(349)	(672)	(1,001)	(1,250)	(1,480)	(1,716)	(1,946)	(2,164)	(2,388)	(2,639)	(2,912)	(3,118)
Available Remaining Capacity	1,675	1,356	1,031	785	559	325	98	(116)	(338)	(587)	(857)	(1,060)
Survival Horizon: 7	PASS	PASS	PASS	PASS	PASS	PASS	WARNING	FAIL	FAIL	FAIL	FAIL	FAIL



THE FINANCIAL STORY

CHAPTER 4: WHAT SHOULD HAPPEN?

WHAT SHOULD HAPPEN?

Strategic & Tactical Analysis Process

What Should Happen?
(Prescriptive Analysis)

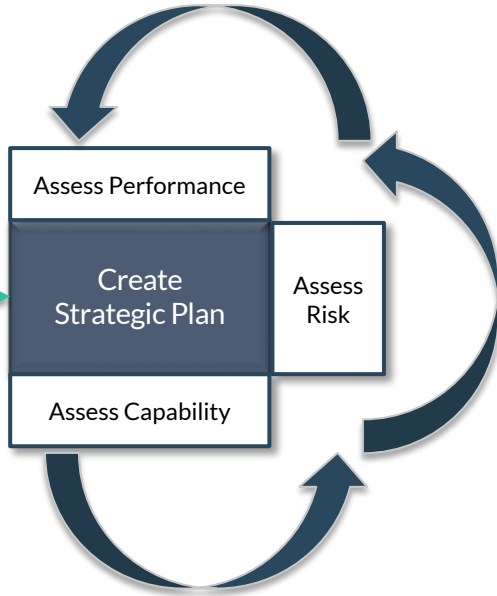
Gather / Analyze

Scenario Analysis
Results
(Predictive)

Choose best
initiatives /
strategies

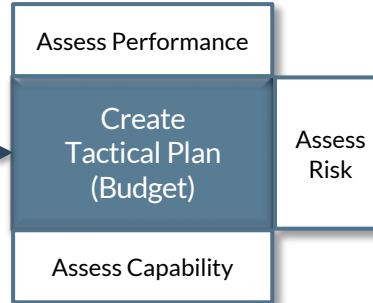
Finance Team
Expertise

Plan



Run Multiple Scenarios / Iterations

Budget



Communicate

Document
Assumptions and
Requirements

Executive and
Board Approval

WHAT SHOULD HAPPEN – ES BANK

PROJECTED FINANCIAL & RISK METRICS

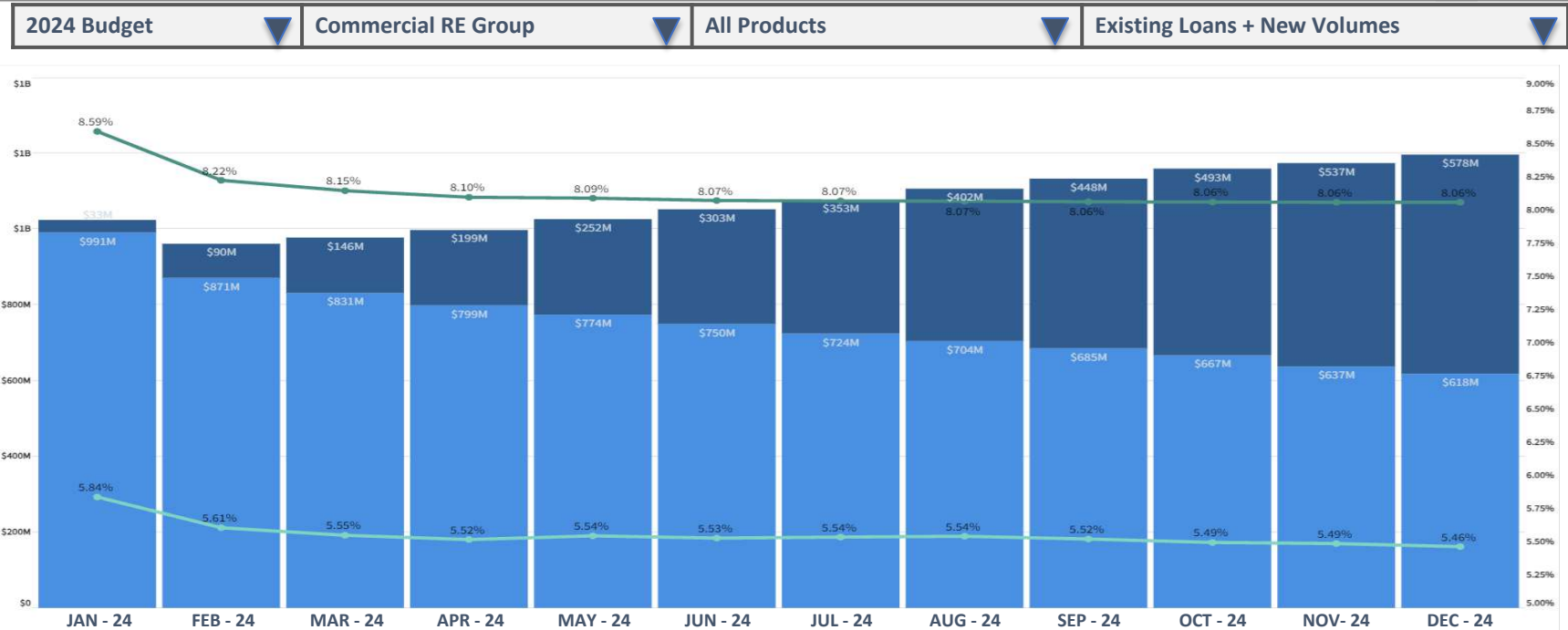
All the previous reports in **WHAT COULD HAPPEN**
(Financials, KPIs, Capital, Risk, etc.)
for the **SHOULD HAPPEN PLAN** you create.

PLUS more detailed reports and analytics
to provide detailed direction for the organization,
for example...

WHAT SHOULD HAPPEN - ES BANK

What Should Happen?
(Prescriptive Analysis)

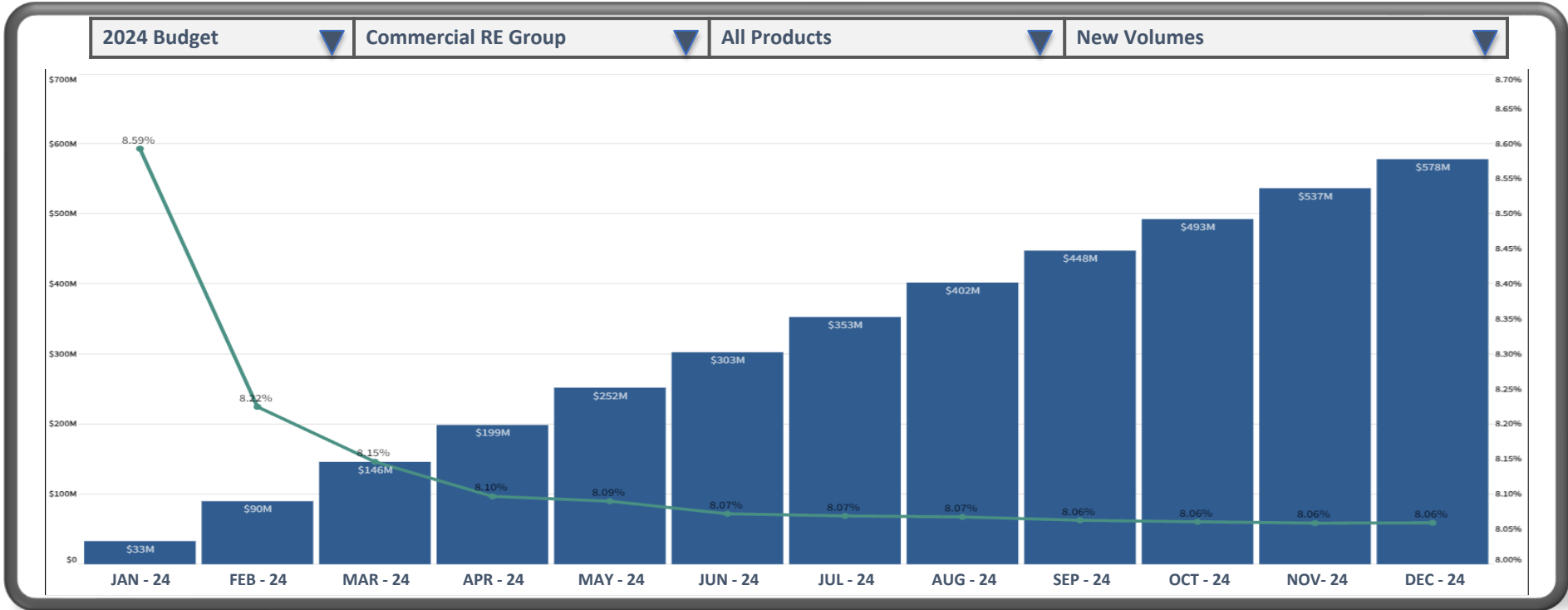
PROJECTED PORTFOLIO GROWTH



WHAT SHOULD HAPPEN - ES BANK

What Should Happen?
(Prescriptive Analysis)

PROJECTED NEW ORIGINATIONS



WHAT SHOULD HAPPEN – ES BANK

What Should Happen?
(Prescriptive Analysis)

PLANNED PROJECTS & FIXED ASSETS NEEDED



EMPYREAN REPORTING

Financial Summary (No, Total Institution, 2023 Budget, January Forecast)

Existing/Margi...	Account Sub-Type	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	2023
Existing	Fixed Assets	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136	-\$19,086,136
Marginal	Fixed Assets		\$27,000	\$122,967	\$119,572	\$128,178	\$124,450	\$120,722	\$116,994	\$113,267	\$109,539	\$105,811	\$102,083	\$102,083
	Depreciation Expense			\$33	\$3,394	\$3,394	\$3,728	\$3,728	\$3,728	\$3,728	\$3,728	\$3,728	\$3,728	\$32,917



EMPYREAN REPORTING

Request List (Existing/Marginal, Total Institution, January Forecast)

Request ID	Status	Fixed Asset Category	Description	Comments	Priority	Department Name	Purchase Date	In Service Date	Deprec Method	Quantity	Purchase Cost	Capitalized Amount	Monthly Depreciation	ROY Depreciation	Planned Horizon Depreciation
39	In Progress	Laptop	Laptops for Loan	All officer laptops are	HIGH	Manhattan Main	2023-05-01	2023-06-01	Straight l	6	\$2,000	\$12,000	\$333	\$0	\$2,333
40	In Progress	Furniture	Loan officer desks for	Part of branch	MEDIUM	Manhattan Main	2023-02-01	2023-03-01	Straight l	4	\$500	\$2,000	\$33	\$0	\$333
41	In Progress	Server	New Kiosks for the	--	HIGH	Manhattan Main	2023-03-01	2023-04-01	Straight l	6	\$6,000	\$36,000	\$1,000	\$0	\$9,000
42	In Progress	Server	New ITM machines	--	HIGH	Manhattan Main	2023-03-01	2023-04-01	Straight l	4	\$15,000	\$60,000	\$1,667	\$0	\$15,000
43	In Progress	Server	Rewire entire branch	--	CRITICAL	Manhattan Main	2023-02-01	2023-04-01	Straight l	1	\$25,000	\$25,000	\$694	\$0	\$6,250
										21	\$48,500	\$135,000	\$3,728	\$0	\$32,917

WHAT SHOULD HAPPEN - ES BANK

PAYROLL & PERSONNEL PLAN

2024 Final BUDGET | Payroll & Personnel Plan

Financial Year 2024

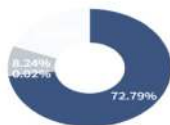
Departments:

Current	
Current FTE	645.23
Current Salary	\$17,353,984
Current Head Count	400
Existing	
Existing Employee Target Increase (%)	4.00%
Existing Employee Target Increase (\$)	\$18,048,143

Planned	
Planned FTE	647.23
Planned Salary	\$18,010,300
Planned Head Count	402
Existing	
Existing Employee Planned Salary Increase (%)	0.03%
Existing Employee Planned Salary Increase (\$)	\$17,874,603

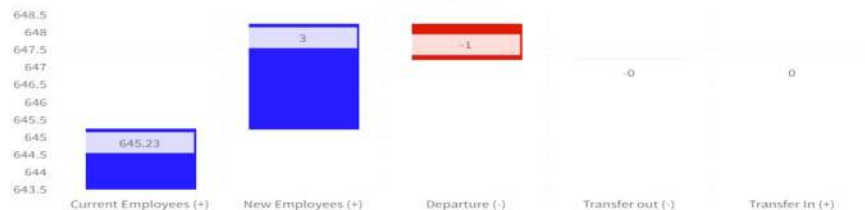
Variance	
FTE	2
Salary	\$656,316
Head Count	2
Total Change (Existing, New, Departures)	3.78%
Existing	
Above/Below Target (Existing)	-0.01%
Existing Employee Salaries	-\$173,540

Planned Payroll



— Salary — Bonus — Benefits — Taxes

FTE WaterFall



Employee Waterfall	Planned FTE Count	Planned Head Count	Salary	Bonus	Bonus %	Total Compensation	Benefits	Taxes	Total Comp Included Benefits And Taxes
Planned Employees	647	402	18,010,300	5,600	0.0 %	18,015,900	2,039,163	4,686,213	24,741,277
Current Employees	645	400	17,353,984	-	0.0 %	17,353,984	2,035,158	4,676,681	24,065,823
New Employees	3	3	163,200	5,600	3.0 %	168,800	5,722	13,451	187,973
Departures	1	1	(27,503)	-	0.0 %	(27,503)	-	(3,919)	(33,138)
Transfers Out	-	-	-	-	0.0 %	-	-	-	-
Transfers In	-	-	-	-	0.0 %	-	-	-	-

BankDirector

Lunch & Learn Session 2: Leveraging Data to Tell Your Financial Story

Scan here to fill out
the evaluation for
this session.



Ken Levey

Empyrean Solutions, LLC

Bryan Ridgway

Empyrean Solutions, LLC

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