Bank Branch Profitability Analysis

A Risk-Adjusted Approach to Measuring Branch Performance and Efficiency

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Project Objective & Scope

Beyond Simple Profit

The goal was to go beyond simple 'Net Profit' and assess true financial health of branches across the regions:

- Risk-Adjusted Return (RAR): Profit normalized for volatility.
- Efficiency Analysis: Detecting cost inefficiencies.
- Stress Testing: Simulating a +1% interest rate hike.

Executive Summary

The "Risk" Region (East)

Generates the most revenue **$5.3bn** but is our most volatile and expensive region. It makes money because it is huge, not because it is smart.

The Cost Problem

90% of our costs are fixed (**60% Salaries, 30% Rent**). We cannot cut costs fast enough when business slows down. We lack flexibility to deal with downturns.

The Future Risk

A **+1%** rate shock would boost Profit Margin from **33%** to nearly **40%**. Our inefficient branches are the most vulnerable to these rate changes.

Finding #1: The Efficiency Gap

Branch Ranking by Risk Adjusted Return (RAR)

City/Branch ID	Net Profit	PVI	Profit Margin %	Cost to Income %	LDR %	Fee Income %	RAR
⊟ Houston							
6016	$205.48M	$5.12M	43.79%	55.01%	82.17%	43.94%	111.39% ▲
⊟ Washington							
6008	$188.84M	$4.83M	41.61%	57.01%	73.54%	52.25%	108.62% ▲
⊟ Milwaukee							
6030	$182.49M	$5.47M	40.74%	57.88%	71.32%	45.83%	92.61% ▲
⊟ Minneapolis							

Branch Ranking by Risk Adjusted Return (RAR)

City/Branch ID	Net Profit	PVI	Profit Margin %	Cost to Income %	LDR %	Fee Income %	RAR
⊟ Philadelphia							
6006	$42.22M	$4.71M	13.16%	84.92%	55.91%	58.59%	24.90% ▼
⊟ Cleveland							
6029	$61.25M	$6.08M	17.78%	80.60%	58.33%	52.68%	27.99% ▼
⊟ Tampa							
6035	$100.61M	$6.93M	26.99%	71.39%	59.95%	53.01%	40.34% ▼
⊟ Los Angeles							

Top Performer: Houston (6016)

- ✓ Cost-to-Income: **55%** (Lowest)
- ✓ RAR %: **111%** (Highest)
- ✓ Loan/Deposit Ratio: **82%** (Highest)
- ✓ Profit Margin: **44%** (Highest)

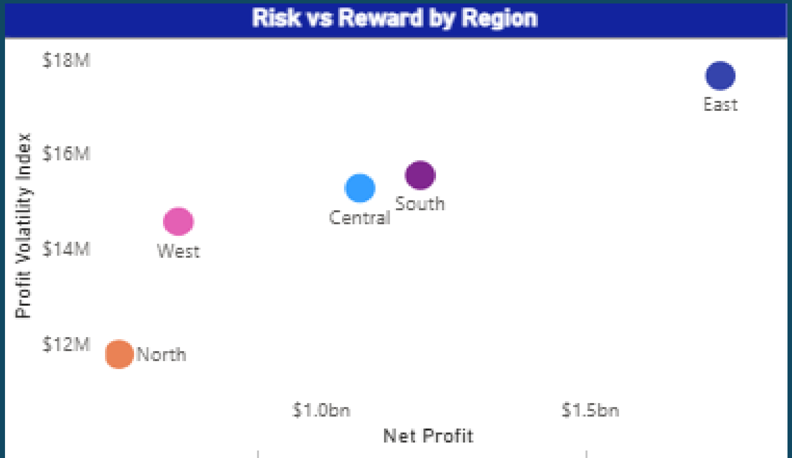
Bottom Performer: Philadelphia (6006)

- ❖ Cost-to-Income: **85%** (Highest)
- ❖ RAR %: **25%** (Lowest)
- ❖ Loan/Deposit Ratio: **56%** (Lowest)
- ❖ Profit Margin: **13%** (Lowest)

Finding #2: Regional Performance

Regional KPI Scorecard

Region	Net Profit	Profit Volatility Index	Profit Margin %	Cost to Income %	Loan/Deposit Ratio %	Fee Income %	Risk Adjusted Return
North	$0.62bn	$11.79M	31.37%	67.10%	66.87%	48.56%	29.45%
South	$1.19bn	$15.56M	35.49%	63.10%	71.17%	47.08%	26.45%
Central	$1.07bn	$15.29M	33.35%	65.15%	66.24%	50.39%	24.37%
West	$0.74bn	$14.59M	31.22%	67.22%	66.78%	48.80%	23.34%
East	$1.74bn	$17.66M	32.92%	65.59%	67.41%	50.24%	21.10%



The South (The Model Zone): This region is doing the best. It has the highest profit margin **(35%)** and the lowest costs **(63%)**.

The East (The Risk Zone): High Net Profit **($1.74bn)** but lowest Risk-Adjusted Return **(21%)** due to high volatility.

The North (The Safe Zone): Low Growth, High Stability. Lowest Profit volume **($0.62bn)** but the highest Risk-Adjusted Return **(29%)**.

The West (The Problem Zone): This region is struggling operationally. It generates very less profit in relative to the risk it takes. It needs major changes.

The Central (The Potential Zone): This region is average in all areas. With a little improvement, it could become one of the best.

Finding #3: Lending Strategy

High Lending Strategy + Cost Efficiency = Stable Profit

The Insight

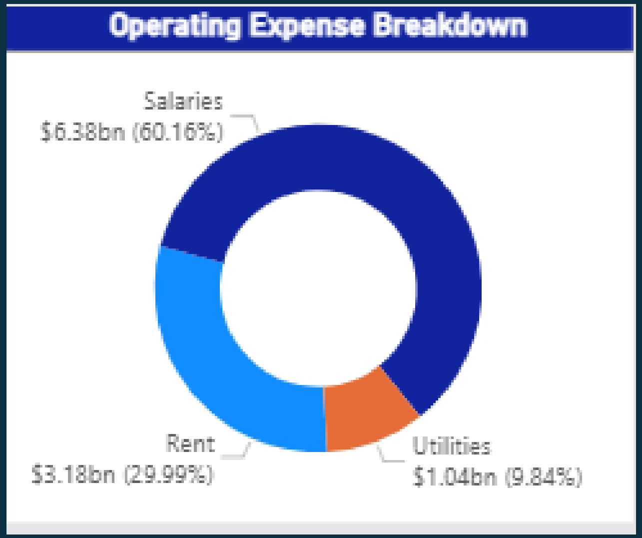
There is a direct link between **High Returns** and **High Lending Volume**. 7 of our Top 10 branches also ranked in Top 10 when it comes to Loan-to-Deposit Ratios.

The Risk

Houston Branch: LDR is **82.17%** (Bank Average: **67%**).

<u>Warning</u>: While profitable, Houston has very low cash reserves. If depositors withdraw funds, Houston faces a **Liquidity Crisis**.

Finding #4: The Cost Problem



Expense Breakdown

- ❑ Salaries (60%)
- ❑ Rent (30%)
- ❑ Utilities (10%)

Because we couldn't cut salaries and rent quickly enough, our profits crashed in Q1 and Q3 of 2025.

Finding #5: What-If Analysis

What happens if Interest Rates change by 1%?

33%

Current Margin

40%

Potential Margin

Branches with high Cost-to-Income Ratios are the most sensitive to these rate changes. A rate drop might completely wipe out their thin margins and make them unprofitable.

Strategic Recommendations

1. The “Houston” Blueprint

Replicate Branch 6016’s (Houston) operational model (High Efficiency + Active Lending). Target is to reduce peer Cost-to-Income towards Houston’s 55%.

2. Variable Restructuring

Introduce performance-based bonuses or commissions, making a portion of compensation variable and tying it directly to the company’s performance and sales.

3. Operational Review

Conduct an operational audit for “Bottom 10 Branches”, for potential closure or downsize of specific branches to reduce the fixed real estate burden.

Additional step to be taken:
Implement automated monitoring system for branches with LDR > 75% (like Houston), to make sure the branches have enough cash reserves to stay out of **Liquidity Crisis**.

Thank You