Assignment 1

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FIN 6326 Commercial Banking
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DuPont analysis is an analytical tool created for evaluating a firm's internal efficiency with regard to its performance and financial condition. We have already conducted the analysis for *BankUnited*. To better understand the adequacy of the level of its (in)efficiencies, we should implement a peer group comparison. For simplicity, we picked one bank, *Raymond James Bank* as its peer.

1. **Discuss whether *Raymond James Bank* can be a peer comparable to *BankUnited*.**

   Raymond James Bank is a comparable peer since they are both in Florida. In numerical terms, they have similar characteristics.

	BankUnited	Raymond James
Ticker	BKU	RJF
Share Price	$ 42.17	$ 99.19
Number of employees	1470	287
Founded	1984	1994
Total Assets	$ 35,622,798	$ 36,922,251
Total Liabilities	$ 32,220,417	$ 35,509,917
Shareholders' Equity	$ 3,402,381	$ 2,597,306
Net Interest Income	$ 829,419	$ 661,666
Net Income	$ 455,672	$ 386,241
Operating Income	$1,022,206	$753,242

Their largest difference would be the difference between their share price, their number of employees, their year of founding, and their shareholders' equity. However, their Total Assets, Total Liabilities, and Net Income are similar figures.

When looking at their stock performance, it is relevant to notice that Raymond James Bank has performed considerably better than Bank United in the previous six years.
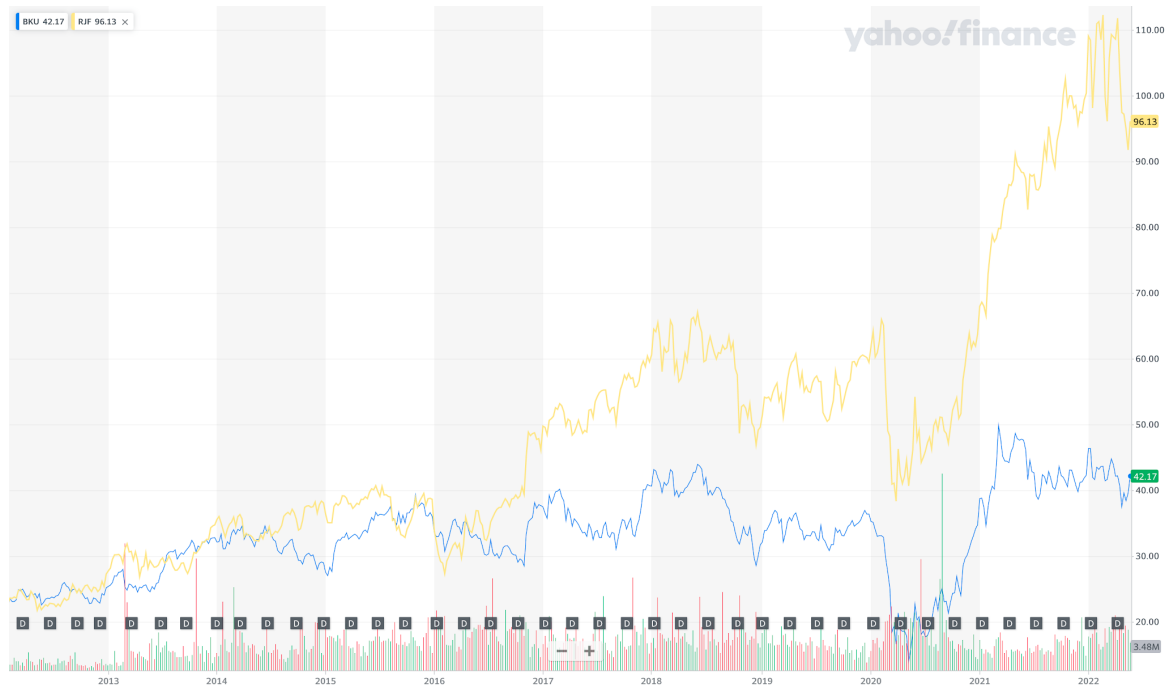
2. **Conduct a DuPont analysis for *Raymond James Bank*. (Note: the analysis for *BankUnited* has been done in class.)**

While analyzing the figures for both banks, I decided to leverage my knowledge of Python to analyze these two banks and the possibility of analyzing several banks.

The FFIEC provides the option to download these reports in a text format extension they name (SDF). Upon a cursory look, these are equivalent to a CSV (Comma Separated Values) but instead delimited by a semicolon (;).

While my approach saves time, ideally, it would be best to write something that pulls the data directly from the FFIEC website. My work is documented here: https://nbviewer.org/github/danielcs88/dupont_analysis/blob/master/dupont_analysis_a assignment.ipynb

See below the ratios calculated manually:

$$\text{ROE} = \frac{\text{Net income}}{\text{Total equity}} = \frac{\$386{,}241}{\$2{,}597{,}306} = 14.87\%$$

$$\text{Equity Multiplier} = \frac{\text{Total balance sheet assets}}{\text{Total equity}} = \frac{\$36{,}922{,}251}{\$2{,}597{,}306} = 14.67$$

$$\text{ROA} = \frac{\text{Net income}}{\text{Total balance sheet assets}} = \frac{\$386{,}241}{\$36{,}922{,}251} = 10.46\%$$
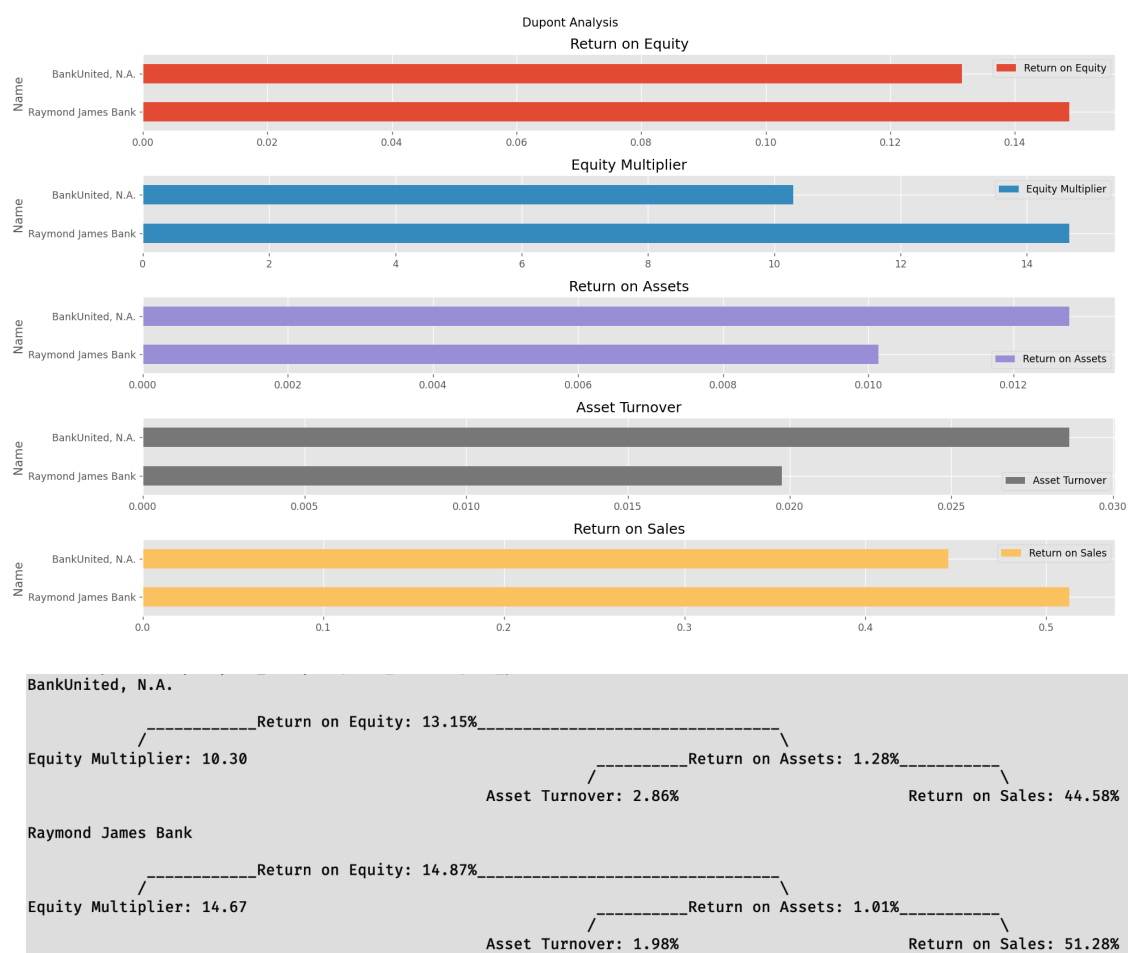
$$\text{Operating income} = \sum \begin{bmatrix} \text{Total interest income} \\ - \text{ Total interest expense} \\ - \text{ Provision for loan and lease losses} \\ + \text{ Total noninterest income} \end{bmatrix} = \sum \begin{bmatrix} \$702{,}703 \\ - \$41{,}037 \\ -(-\$65{,}488) \\ \$26{,}088 \end{bmatrix} = \$753{,}242$$

$$\text{Return on Sales} = \frac{\text{Net Income}}{\text{Operating Income}} = \frac{\$386{,}241}{\$753{,}242} = 51.28\%$$

$$\text{Asset Turnover} = \frac{\text{Operating Income}}{\text{Total balance sheet assets}} = \frac{\$753{,}242}{\$36{,}922{,}251} = \mathbf{1.98\%}$$

3. **Compare the results of *Raymond James Bank* with those of *BankUnited*.**

	Return on Equity	Equity Multiplier	Return on Assets	Asset Turnover	Return on Sales
BankUnited, N.A.	13.15%	10.30	1.28%	2.86%	44.58%
Raymond James Bank	14.87%	14.67	1.01%	1.98%	51.28%

Dupont Analysis

Return on Equity

BankUnited, N.A.	(bar ~0.131)
Raymond James Bank	(bar ~0.147)

Equity Multiplier

BankUnited, N.A.	(bar ~10.3)
Raymond James Bank	(bar ~14.67)

Return on Assets

BankUnited, N.A.	(bar ~0.0128)
Raymond James Bank	(bar ~0.0101)

Asset Turnover

BankUnited, N.A.	(bar ~0.0286)
Raymond James Bank	(bar ~0.0198)

Return on Sales

BankUnited, N.A.	(bar ~0.4458)
Raymond James Bank	(bar ~0.5128)

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BankUnited, N.A.

                _____Return on Equity: 13.15%_____
              /                                                                  \
Equity Multiplier: 10.30                              _____Return on Assets: 1.28%_____
                                                    /                                            \
                            Asset Turnover: 2.86%                          Return on Sales: 44.58%

Raymond James Bank

                _____Return on Equity: 14.87%_____
              /                                                                  \
Equity Multiplier: 14.67                              _____Return on Assets: 1.01%_____
                                                    /                                            \
                            Asset Turnover: 1.98%                          Return on Sales: 51.28%
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While Raymond James is more efficient with its equity capital with higher values for Return on Equity and its Equity Multiplier, BankUnited is more efficient with its assets which is reflected in its higher values in Return on Assets and Asset Turnover. However, Raymond James remains more efficient with its Return on Sales.

When inspecting the operating income of both banks, one can see how despite Raymond James Bank being more efficient in terms of Sales, BankUnited generates significantly more noninterest income.

(in millions)	BankUnited, N.A.	Raymond James Bank
Total interest income	$ 957,036	$ 702,703
Total interest expense	$ (127,617)	$ (41,037)
Provision for loan and lease losses	$ 67,119	$ 65,488
Total noninterest income	$ 125,668	$ 26,088
Operating Income	$ 1,022,206	$ 753,242

BankUnited, N.A. and Raymond James Bank
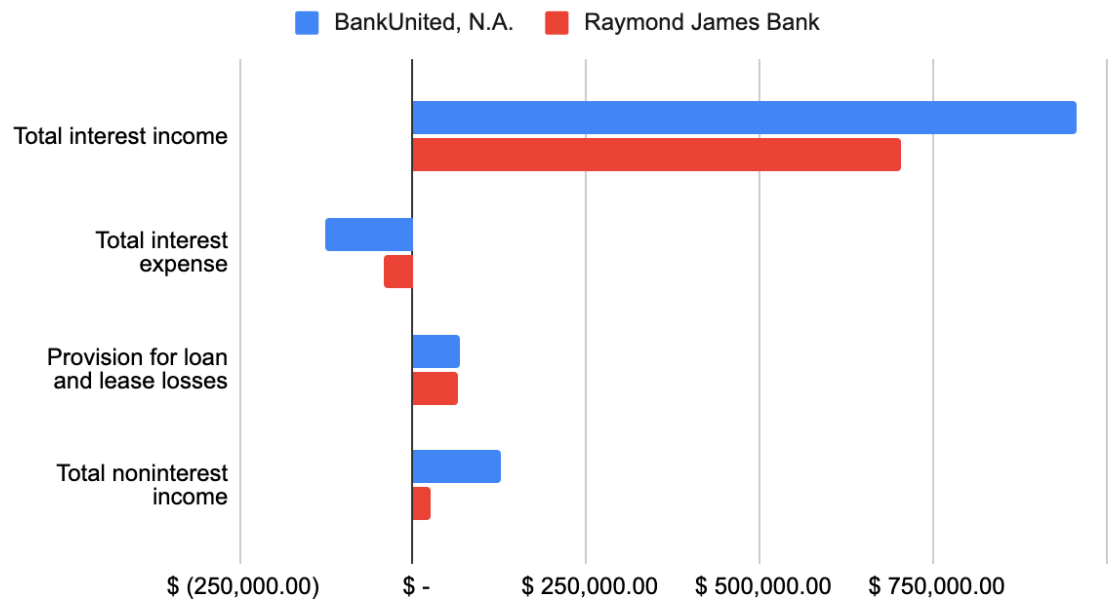
4. **Discuss the implications of the peer bank analysis for *BankUnited*.**

The implications of this peer bank analysis is relevant since at a cursory glance, the balance sheet of these two banks seems similar. However, we can infer that since Raymond James Bank probably has higher net value customers than BankUnited. BankUnited has more branches and a larger customer base than Raymond James Bank.