

Analysis Report of Bank of NewYork Mellon

Yiyang Zhang



BNY MELLON



Introduction

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- The Bank of New York Mellon Corporation, commonly known as BNY Mellon, is an American multinational investment banking and financial services corporation. It was formed from the merger of The Bank of New York and the Mellon Financial Corporation in 2007, making it one of the world's largest financial services firms.
- Based on the information from National Information Center, on 2023 November, it's ranked 13th with asset value of \$430,382,000.
- Take a view into its 10-K form of Year 2022, we can have its business are divided into following 4 categories:
 - Securities Services
 - Market and Wealth Services
 - Investment and Wealth Management
 - Other segment: including the leasing portfolio, corporate treasury activities (including our securities portfolio), derivatives and other trading activity, corporate and bank-owned life insurance, renewable energy and other corporate investments and certain business exits
- Based on this information, we can have that the Bank of New York Mellon Corporation (BNY Mellon) operates in various business segments, indicating a diverse financial services profile beyond pure commercial banking.

- For the ownership structure, based on the report of 2023-09-30. We can have that the institutional investors are holding the 86.45% of the shares in total. Mutual Funds also are held a lot of its shares.
- And for the insider, total insider holding is less than 1%. And in the last 6 months, the insiders were selling their shares.

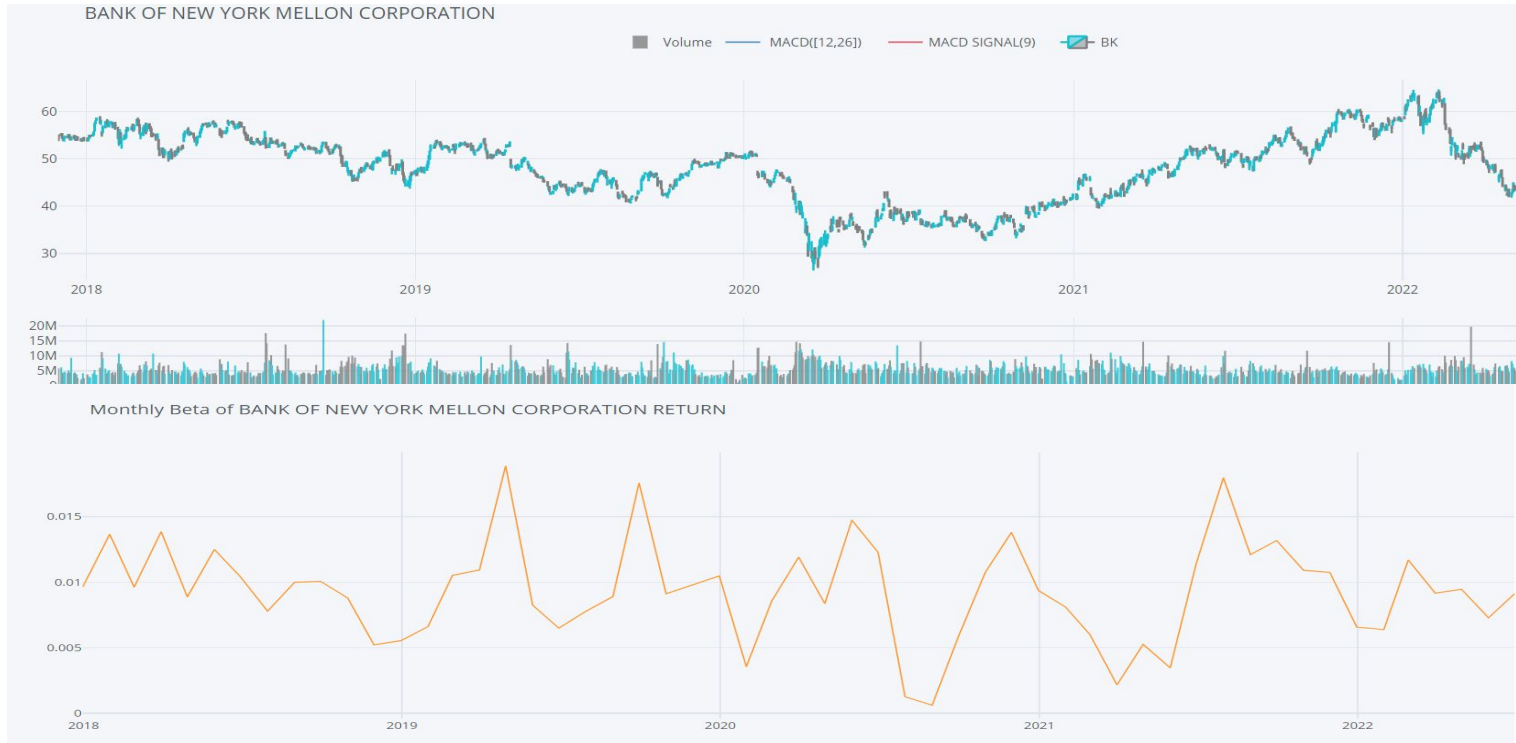
Last 6 Months	Shares	Trans
Purchases	8,645	10
Sales	49,045	2
Net Shares Purchased (Sold)	-40,400	12
Total Insider Shares Held	1.05M	N/A
% Net Shares Purchased (Sold)	-3.70%	N/A

Holder	Shares	% Out	Value
Vanguard Group Inc	70207700	0.0913	3300113013
Blackrock Inc.	65308291	0.0849	3069816288
Dodge & Cox Inc	59030158	0.0768	2774712639
State Street Corporation	32165130	0.0418	1511921970
Artisan Partners Limited Partnership	19649377	0.0255	923618986
Geode Capital Management, LLC	16833198	0.0219	791244489
First Eagle Investment Management, LLC	16241176	0.0211	763416495
Davis Selected Advisers, LP	12996471	0.0169	610899133
Longview Partners (Guernsey) LTD	12593677	0.0164	591965800
FMR, LLC	11921987	0.0155	560393011



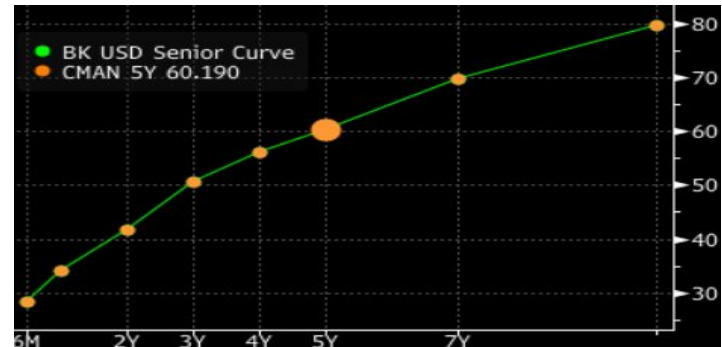
Market Overview

Market Overview



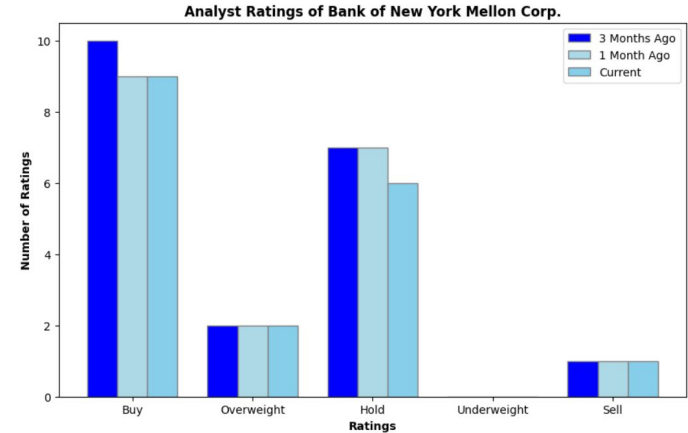
Market Overview

- For Volatility:
 - The daily volatility for last five year period is 0.020
 - The annual volatility for last five year period is 0.31
- For Credit Rating:
 - For its deopsites and debts, all of them are rated as A or better from Moody's, S&P, Fitch, and DBRS
 - However, its stock was rated as BBB level by Moody's, S&P, and Fitch
- The CDS prices are shown in the following:

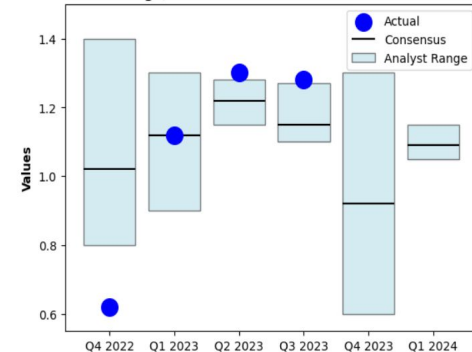


Market Overview

- Analyst Opinions
 - For Rating:
 - In both 3 months ago, 1 month ago, and current, most analyst will assign rating for Bank of New York Mellon as Buy or Hold.
 - A few analysts are rating Bank of New York Mellon as selling.
 - Taking their rating into average, the rating for Bank of New York Mellon is Overweight.
 - For Estimated Per-Share Earning:
 - We can see that, the analysts over estimated the performance of Bank of New York Mellon in the end of year 2022, however, the Bank of New York Mellon start to perform better than the predicted since then.



Analyst Per-Share Earnings, Actuals & Estimates of Bank of New York Mellon Corp.





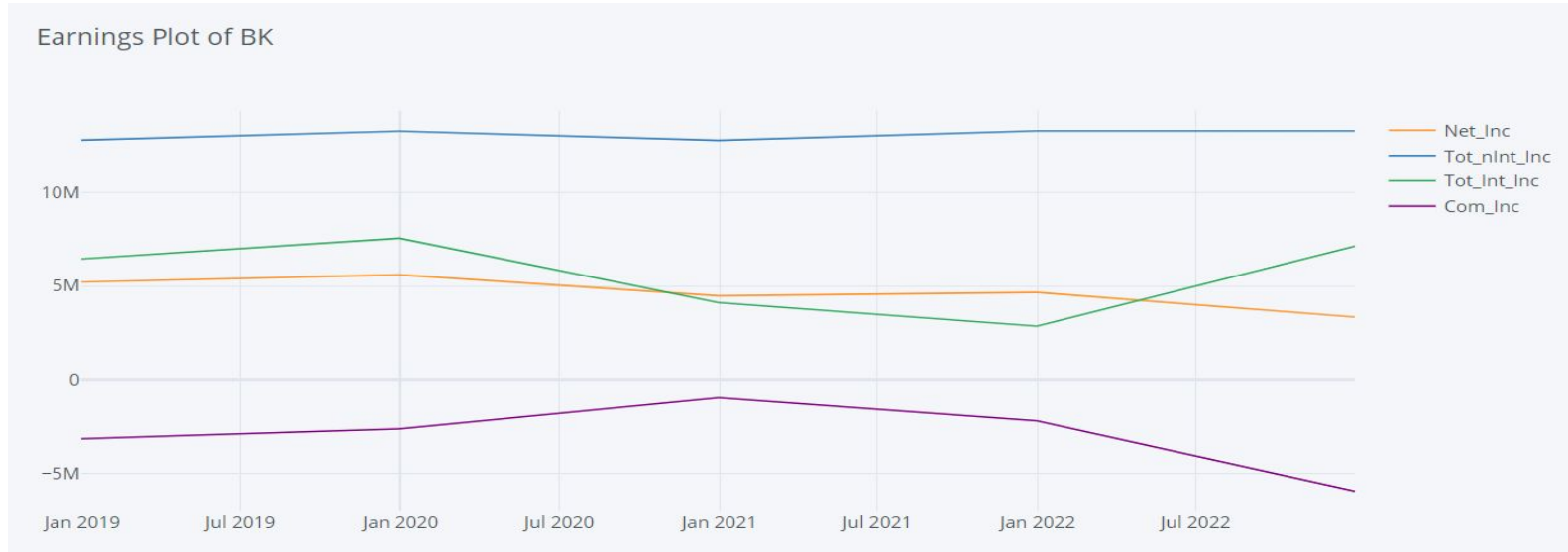
Performance and Financial Position

Important Findings

- In the analysis, I calculated the trends for 14 categories of ratios for New York Mellon's performance and financial position in the last 5 years.
 - The categories are shown on the right hand side.
 - For detailed results and all of the plot, please check the report.
 - Now I am going to talk about only a part of the categories that their results contain interesting information. And potentially unmask some of the merit and demerit of the Bank of New York Mellon.
1. earnings
 2. net interest margins
 3. non-interest or fee income
 4. revenues, expenses
 5. loan mix
 6. past due and losses
 7. losses and loan reserves
 8. liquidity and funding
 9. capitalization ratios
 10. growth rates
 11. asset composition
 12. liability composition
 13. maturity gap
 14. interest rate sensitivity

Important Findings

- The net income of BK slightly dropped in the recent years.
- Although Total Interest Income increased in the recent years, the drop in comprehensive income still dragged down the net income of BK.

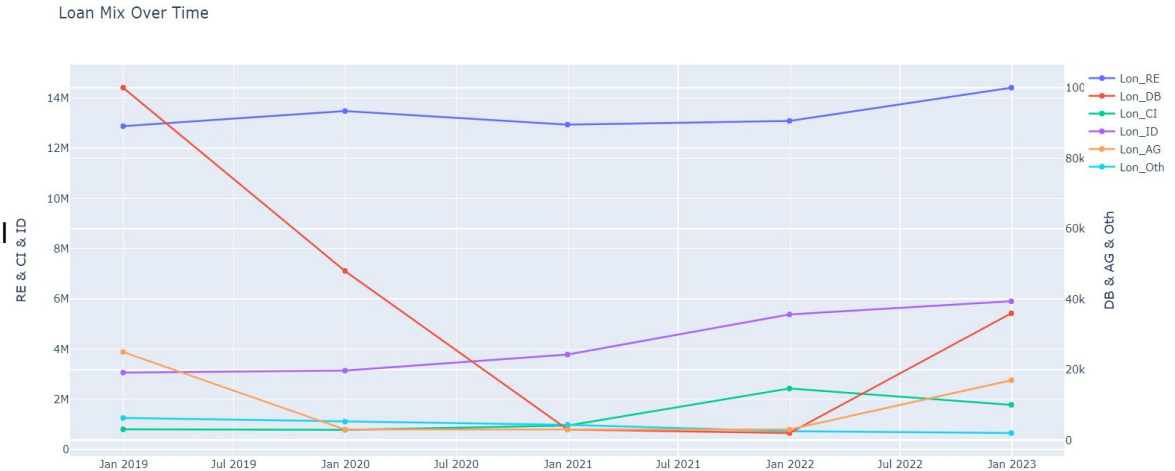


Important Findings

- For Other Loans and Leases and Commercial and Industrial Loans their level are relatively stable over the last five years.
- For Loans to Dep Inst & Oth Bank Accept and Agricultural Loans, they first significantly dropped in the first two years and then started to increase. This might mean BK abandoned these loans first, and then reconsidered to take them back into their loan pool.
- For Real Estate Loans and Loans to Individuals, they are gradually increasing over the last five years, and based on the proportion, they are the main loan operations of BK.

Loan mix

- Real Estate Loans
- Loans to Dep Inst & Oth Bank Accept
- Commercial and Industrial Loans
- Loans to Individuals
- Agricultural Loans
- Other Loans and Leases



Important Findings

For all subcategories of Past Due and Losses, we can see that they gradually increased over the last five years. However, combined with the negative asset growth over the last five years, we can have that the quality of the asset of Bank of New York Mellon is getting worse.

Past Due and Losses Over Time



Important Findings

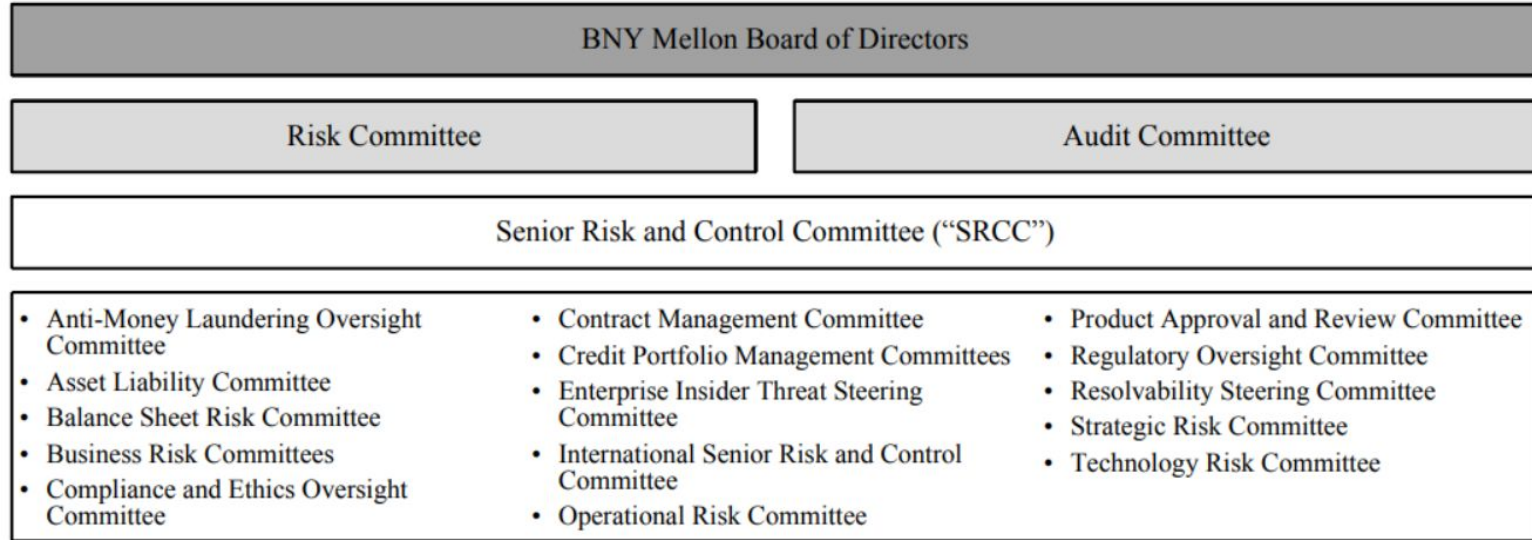
- For Assets, Equity Capital, and Net-loans and leases, they all had an increase in year 2020, and then they start to decrease for the rest three years.
- For Noncore Funding, in the last 5 years, in the first four years of them, it was decreasing. And in the last year, it start to increase.
- In summary, we can see that the Bank of NewYork Mellon did not have a good growth performance in the last five years.





Risk Profile

Risk Management Structure



- BNY Mellon's first line of defense includes senior management and business and corporate staff, excluding management and employees in Risk Management, Compliance and Internal Audit.
- Risk & Compliance is the independent second line of defense.
- Internal Audit is BNY Mellon's third line of defense and serves as an independent, objective assurance function that reports directly to the Audit Committee of the Company's Board of Directors.

Interest Risk Management

- The baseline scenario incorporates the market's forward rate expectations and management's assumptions regarding client deposit rates, credit spreads, changes in the prepayment behavior of loans and securities and the impact of derivative financial instruments used for interest rate risk management purposes as of Dec. 31, 2022.
- These assumptions have been developed through a combination of historical analysis and future expected pricing behavior and are inherently uncertain. Actual results may differ materially from projected results due to timing, magnitude and frequency of interest rate changes, and changes in market conditions and management's strategies, among other factors.
- Client deposit levels and mix are key assumptions impacting net interest revenue in the baseline as well as the hypothetical interest rate scenarios.
- The earnings simulation model assumes static deposit levels and mix and it also assumes that no management actions will be taken to mitigate the effects of interest rate changes.

Estimated changes in net interest revenue (in millions)	Dec. 31, 2022	Sept. 30, 2022	Dec. 31, 2021
Up 100 bps rate shock vs. baseline	\$ 214	\$ 267	\$ 688
Long-term up 100 bps, short- term unchanged	30	(17)	204
Short-term up 100 bps, long- term unchanged	184	283	483
Long-term down 50 bps, short- term unchanged	(20)	7	(98)
Down 100 bp rate shock vs. baseline	(281)	(394)	392

Ratios for Risk Profile

- In conclusion, Bank of New York Mellon's financial ratios as of September 2023 demonstrate a strong capital base, high credit quality, moderate leverage, minimal off-balance-sheet risks, adequate regulatory capital, and low exposure to high-volatility real estate markets. These indicators collectively suggest a robust financial health and sound risk management strategies.
- However, their funding structure is not good enough, this is the direction that they should improve in the future.

Ratio	Value
Operational Risk Capital Ratio (Operational Risk)	6.219100
NPL Ratio (Asset Side Risks)	0.001687
Net Stable Funding Ratio (Liability Side Risks)	0.786839
Supplementary Leverage Ratio (SLR) (Liability Side Risks)	0.898504
Off-Balance-Sheet Exposure Ratio (Off-Balance-Sheet Risks)	0.000086
Regulatory Capital Ratio (Regulatory Risk)	0.061997
Real Estate Exposure Ratio (Exposure to Real Estate Markets)	0.000086



Off-balance Sheet Activities

Off-balance sheet

- Bank of New York Mellon's off-balance sheet contains following components:
 - Lending commitments
 - Standby letters of credit ("SBLC")
 - Commercial letters of credit
 - Securities lending indemnifications
- Based on 2023-Q3 10-q, we can see that the Bank of New York Mellon only have Level 1 and Level 2 assets and the Level 2 asset is the main part of their assets. And it do not have any Level 3 assets.
- Its derivatives are mainly used for hedging the interest rate risk from the available-for-sale securities and long-term debts that they are holding

Off-balance sheet Over Time

