



A Case Study on the Effects of a Financial Transaction Tax on Savers in New York

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Overview

New York has a [population](#)¹ of 19.4 million people. Individuals in New York are invested in the stock market through pension funds such as the New York State Common Retirement Fund, 529 College Savings plans such as New York 529 Plan, ABLE plans such as NY ABLE and individually through individual retirement accounts (IRAs) and 401(k)s.

There are various proposals pending in Congress for a financial transaction tax (FTT). The following report provides an analysis of the projected impact a FTT would have on holders of 401(k) plans, 529 College Savings plans, public pension plan and individual investors. The analysis includes the projected impact of a “Type 1” tax on trading (10 basis point equities, 10 basis points bonds, 10 basis point derivatives); a “Type 2” tax on trading (50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives); and a “Type 3” tax on trading (2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing).

Key Findings

FTT Impact on New York State Common Retirement Fund Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.13% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.13% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$317 million	\$13.2 billion	\$30.68 billion
TYPE 2 (50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$106.2 million	\$4.41 billion	\$10.26 billion
TYPE 3 (2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$21.23 million	\$3.2 billion	\$7.65 billion

¹ U.S. Census Bureau QuickFacts: New York. (n.d.). Census Bureau QuickFacts. <https://www.census.gov/quickfacts/NY>



FTT Impact on New York 529 Plan Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 6.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$3.91 million or tuition for 557 students	\$54.59 million	\$117.34 million
TYPE 2 50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$1.68 million or tuition for 240 students	\$23.42 million	\$50.35 million
TYPE 3 (2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$1.3 million	\$17.62 million	\$38.95 million

FTT Impact on NY ABLE Plan Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 6.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$48,027	\$670,417	\$1.44 million
TYPE 2 50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$38,066	\$531,368	\$1.14 million
TYPE 3 (2 basis points across asset classes increasing incrementally over	\$29,446	\$399,730	\$883,404



5 years to 10 basis points ongoing)			
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FTT Impact on the Individual Investor in New York:

TYPE OF FTT	YEARLY PROJECTED BURDEN PER INDIVIDUAL	OVER 40 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$1,677	\$67,077
TYPE 2 50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$399	\$15,970
TYPE 3 2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$301	\$12,073

I. New York State Common Retirement Fund Analysis

The following is a case study on the projected impact of a FTT on New York State Common Retirement Fund participants based on recent financial transaction tax proposals.

The New York State Common Retirement Fund was founded in 1967 with the purpose of incentivizing public teachers, police and employees to work in New York and has been a valuable tool for retaining public employees and ensuring a high-quality workforce. Under the plan, participants receive a cost of living adjustment if the pension plan makes a 7.13% return each year. There are currently 1,139,971 participants in the New York State Common Retirement Fund.

An examination of the [2019 Annual Report](#)² indicates that the New York State Common Retirement Fund has \$210.5 billion AUM, of which 35.34% are invested in domestic equities, 22.01% in global fixed income, 17.48% in international equity, 9.52% in private equity, 7.55% in real estate, 3.77% in absolute return strategy investments, 2.95% in short-term investments, 1.37% in opportunistic funds, 1.07% in real assets and 0.432% in mortgage loans.

For the purpose of this calculation, it is estimated that the New York State Common Retirement Fund has a turnover rate of 0.72 for equities, 1.17 for bonds and 0.95 for derivatives. Calculations of the projected FTT are based on this notional value of the portfolio based on such turnover rate, rather than the assets under management. For the purpose of this case study, the turnover was modeled after publicly available information on average pension fund turnover rates.³

FTT Impact on New York State Common Retirement Fund Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.13% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.13% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$317 million	\$13.2 billion	\$30.68 billion
TYPE 2 (50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$106.2 million	\$4.41 billion	\$10.26 billion
TYPE 3 (2 basis points across			

² 2019 *Comprehensive Annual Financial Report*. (2019, September). Office of the New York State Comptroller | Thomas P. DiNapoli. <https://www.osc.state.ny.us/files/retirement/resources/pdf/comprehensive-annual-financial-report-2019.pdf>

³ The turnover rate was modeled after the range of average rates of turnover of Calpers, among other pension funds with more detailed monthly accounting of transactions on the annual reports.



asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$21.23 million	\$3.2 billion	\$7.65 billion
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Notably, this example does not take into account “widened spreads” and “deadweight loss” which would also result in increased transaction costs for the pension fund portfolio.

II. New York 529 Plan Analysis

The following is a case study on the projected impact of a FTT on New York 529 Plan participants based on recent financial transaction tax proposals.

The New York 529 Plan was founded in 1996 with the purpose of encouraging families to save for future education costs and is authorized by Section 529 of the Internal Revenue Code as a tax-advantaged saving plan. Overall, in the United States, over 44% of parents utilize 529 plans to save for college and there are currently 500,000 participants in the New York 529 Plan.

An examination of the 2019 Annual report indicates that New York 529 Plan has \$28.5 billion AUM, of which 65.3% is invested in U.S. equity, 7.2% in international equity, 0.98% in alternatives, 11.5% in fixed income and 14.9% in cash equivalents.

For the purpose of this calculation, it is estimated that the New York 529 Plan has a turnover rate of 0.3 for equities and 3.75 for fixed income. Calculations of the projected FTT are based on this notional value of the portfolio based on such turnover rate, rather than the assets under management. For the purpose of this case study, the turnover was modeled after publicly available information on average New York 529 Plan turnover rates.⁴

FTT Impact on New York 529 Plan Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 6.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$3.91 million or tuition for 557 students	\$54.59 million	\$117.34 million
TYPE 2 50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$1.68 million or tuition for 240 students	\$23.42 million	\$50.35 million
TYPE 3 (2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$1.3 million	\$17.62 million	\$38.95 million

⁴ The turnover rate was modeled after the publicly available disclosure on Vanguard funds available to invest in for the New York 529 plan investors.



Notably, the impact of an FTT on a “target date” fund would be substantial and multi-layered, given the number of transactions utilized for such funds.

Further, this example does not consider “widened spreads” and “deadweight loss” which would also result in increased transaction costs for New York 529 Plan participants.

III. NY ABLE Analysis

The following is a case study on the projected impact a FTT would have on NY ABLE plan participants based on recent financial transaction tax proposals.

The NY ABLE, a type of 529A account, was founded in 2017 with the purpose of allowing individuals with disabilities and their families a tax-advantaged way to save money for disability-related expenses of the account's designated beneficiary. There are currently 90,000 participants enrolled in the NY ABLE.

An examination of the 2019 Annual report indicates that NY ABLE has \$9.0 million AUM, of which 35% are invested in equities, 40% in bonds, and 25% are in cash equivalents.

For the purposes of this calculation, it is estimated that NY ABLE has a turnover rate of 0.30 for equities and 3.35 for bonds. Calculations of the projected FTT are based on this notional value of the portfolio based on such turnover rate, rather than the assets under management. For the purpose of this case study, the turnover was modeled after publicly available information on average NY ABLE turnover rates.⁵

FTT Impact on NY ABLE Plan Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 6.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$48,027	\$670,417	\$1.44 million
TYPE 2 50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$38,066	\$531,368	\$1.14 million
TYPE 3 (2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$29,446	\$399,730	\$883,404

⁵ The turnover rate was modeled after the range of average rates of turnover, among other ABLE funds with more detailed monthly accounting of transactions on the annual reports.

Notably, this example does not consider “widened spreads” and “deadweight loss” which would also result in increased transaction costs for NY ABLE plan participants.



IV. Individual and 401(k) Investors Analysis

The following is a case study on the projected impact on a FTT would have on individual retirement accounts and 401(k) plan participants in New York based on recent financial transaction tax proposals.

An examination of a “typical” 401(k) portfolio and/or individual savings mutual fund indicates that individual investors are invested in 82% in equities, 17% in bonds, 0.07% in derivatives (including options), and 0.01% in cash equivalents.

For the purpose of this calculation, it is estimated that the individual investor has \$100,000 invested in a mutual fund over 40 years, with an estimated growth rate of 7% a year. For the purpose of this case study, the turnover rate of 0.63 was modeled after publicly available information from Morningstar on average rates.⁶ Notably, turnover rates can vary widely as high as 800% for some mutual funds and as low as 10% for some index funds. A conservative rate of 80% was included between these valuations.

FTT Impact on the Individual Investor in New York:

TYPE OF FTT	YEARLY PROJECTED BURDEN PER INDIVIDUAL	OVER 40 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis point equities, 10 basis points bonds, 10 basis point derivatives)	\$1,677	\$67,077
TYPE 2 50 basis point equities, 10 basis points bonds, 0.5 basis point derivatives)	\$399	\$15,970
TYPE 3 2 basis points across asset classes increasing incrementally over 5 years to 10 basis points ongoing)	\$301	\$12,073

Further, this example does not consider “widened spreads” and “deadweight loss” which would also result in increased transaction costs for the individual retiree in New York.

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⁶ 63% from Morningstar. <https://www.investopedia.com/articles/mutualfund/09/mutual-fund-turnover-rate.asp>