



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

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Overview

Wisconsin has a [population](#)¹ of 5.8 million people and is known for its fully funded pension plan. Individuals in Wisconsin are invested in the stock market, through pension funds such as the Wisconsin Retirement System, 529 college savings plans such as the Edvest College Savings Plan, 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, and individual investors, among others. The analysis includes the projected impact of a “Type 1” tax on trading (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives) and “Type 2” tax on trading (50 basis points on equities, 10 basis points on bonds, 0.5 basis points on derivatives.)

Key Findings

FTT Impact on the Wisconsin Retirement System Fund Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 5.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 5.00% per year)
TYPE 1 (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives)	\$237.8 million	\$7.8 billion	\$15.8 billion
TYPE 2 (50 basis points on equities, 10 basis points on bonds, 0.5 basis points on derivatives)	\$77.3 million	\$2.5 billion	\$5.1 billion

¹ U.S. Census Bureau QuickFacts: Wisconsin. (2020). Retrieved 30 November 2020, from <https://www.census.gov/quickfacts/WI>

FTT Impact on Wisconsin Edvest College Savings Plan Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives)	\$395,099 or state tuition for 63 students	\$16.1 million	\$37.3 million
TYPE 2 (50 basis points on equities, 10 basis points on bonds, 0.5 basis points on derivatives)	\$184,450 or state tuition for 29 students	\$7.5 million	\$17.4 million

FTT Impact on the Individual Investor in Wisconsin:

TYPE OF FTT	YEARLY PROJECTED BURDEN PER INDIVIDUAL	OVER 40 YEARS (Cumulative cost including compounding interest assuming a growth rate of 6.00% per year)
TYPE 1 (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives)	\$214	\$33,150
TYPE 2 (50 basis points on equities, 10 basis points on bonds, 0.5 basis points on derivatives)	\$63	\$9,750

I. CASE STUDY: The Wisconsin Retirement System

Wisconsin retirement funds have been around as early as 1891 and were consolidated into the Wisconsin Retirement System in 1975 to incentivize individuals to work as public school teachers, police officers and other public professions. This retirement fund has been a valuable tool in 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 5% return each year. There are currently 641,892 participants in the Wisconsin Retirement System. This pension outshines other states, as the national pension plan funding is 72.1% on average and the Wisconsin Retirement System reported a market value funded ratio of 102.9%.²

An examination of the 2018 [report](#)³ indicates that the Wisconsin Retirement System has \$97.7 billion AUM. The core fund uses 10% leverage and approximately 49% is invested in equities, 24.5% in fixed income, 15.5% in inflationary sensitive products, 21% in private equity, real estate, and multi-asset funds that have a minimal 0.1% exposure to derivative products. The variable fund is composed entirely of global equities and uses no leverage.

For the purpose of this calculation, it is estimated that the Wisconsin Retirement System has a turnover rate of 72% for equities, 117% for bonds, and 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.⁴

FTT Impact on the Wisconsin Retirement System Fund Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 5.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 5.00% per year)
TYPE 1 (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives)	\$237.8 million	\$7.8 billion	\$15.8 billion
TYPE 2 (50 basis points on equities, 10 basis points on bonds, 0.5	\$77.3 million	\$2.5 billion	\$5.1 billion

²<https://reason.org/commentary/the-wisconsin-retirement-system-is-fully-funded-and-a-model-for-other-states/>.

³ 2018 Retirement Funds Annual report. (2020). Retrieved 29 November 2020, from https://7ffb9e60-f2dc-4359-b148-1db6b9d76c71.filesusr.com/ugd/69fc6d_e0c664dc85964d78953e358163b6a534.pdf

⁴ 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.

basis points on derivatives)			
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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. In addition, this example did not account for turnover in exchange traded funds as well as the tax burden on asset classes such as multi-asset strategy funds that may have additional exposure to equities, fixed income, and derivatives.

II. CASE STUDY: Edvest College Savings Plan

The Wisconsin Edvest College Savings Plan was founded in 1999 with the purpose of encouraging saving 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 college savings plans to save for college. There are currently 284,747 participants in the Edvest College Savings Plan. In 2017, SavingforCollege.com ranked the Edvest plan as one of the top 10 in one- and three-year 529 plan performance and awarded the program a 5-cap rating for “outstanding flexibility, attractive investments and additional economic benefits.”⁵

An examination of the 2018 [report](#)⁶ indicates that the Edvest College Savings Plan has \$5 billion AUM, of which approximately 42% are invested in passive age based plans, 24% are invested in active age based plans, 6% are invested in passive diversified equity plans 5% are invested in Index U.S. Large Cap Equity Plans, and 23% are invested in other plans.⁷

For the purpose of this calculation, it is estimated that the Edvest College Savings Plan has a turnover range of 4%-7% for index equities funds, a turnover range of 27%-33% for active equities funds, a turnover range of 30%-35% for index bond funds, and a turnover range of 350%-400% for active bond funds. 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 mutual and index funds turnover rates.⁸

FTT Impact on Wisconsin Edvest College Savings Plan Participants:

TYPE OF FTT	YEARLY PROJECTED BURDEN	20 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)	30 YEARS (Cumulative cost including compounding interest assuming a growth rate of 7.00% per year)
TYPE 1 (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives)	\$395,099 or state tuition for 63 students	\$16.1 million	\$37.3 million
TYPE 2 (50 basis points on equities, 10 basis points on bonds, 0.5 basis points on derivatives)	\$184,450 or state tuition for 29 students	\$7.5 million	\$17.4 million

⁵ <https://www.wdfi.org/newsroom/press/2018/CSP5billion.pdf>

⁶ (2019). Retrieved 30 November 2020, from https://www.wdfi.org/_resources/indexed/site/this_is_dfi/annual_report/2017-2019_BiennialReport.pdf

⁷ The percentage of assets by plan was modeled after the California 529 Plan which offers the same type of investment options.

⁸ The turnover rate was modeled after the range of average rates of turnover from Marketwatch.com for TIAA-CERF funds.

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 an increased transaction costs for the Edvest College Savings Plan.

III. CASE STUDY: Wisconsin Individual Investor

Nearly 3.2 million individuals are participating stock market as a tool for saving for education, retirement, and other savings goals, based on a rate of 55% of stock market participation across the United States, according to a Gallup poll last updated in June 2020.⁹ An examination of a “typical” 401(k) portfolio and/or individual retirement mutual fund indicates that individual investors allocate 60% of their portfolio to equities and 40% to bonds.

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 6% a year. For the purpose of this case study, the turnover rate of 63% was modeled after publicly available information from Morningstar on average rates.¹⁰ Notably, turnover rates can vary widely as high as 800% for some mutual funds and as low as 10% for some index funds.

FTT Impact on the Individual Investor in Wisconsin:

TYPE OF FTT	YEARLY PROJECTED BURDEN PER INDIVIDUAL	OVER 40 YEARS (Cumulative cost including compounding interest assuming a growth rate of 6.00% per year)
TYPE 1 (10 basis points on equities, 10 basis points on bonds, 10 basis points on derivatives)	\$214	\$33,150
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Further, this example does not consider “widened spreads” and “deadweight loss” which would also result in increased transaction costs for the individual Wisconsin investor.

Notably, for individual investors invested in 401(k) qualified retirement plan, the tax would apply under all two of the taxes to accounts that were designed to be eligible for tax benefits under IRS guidelines.

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⁹ <https://news.gallup.com/poll/266807/percentage-americans-owns-stock.aspx>.

¹⁰ 63% from Morningstar. <https://www.investopedia.com/articles/mutualfund/09/mutual-fund-turnover-rate.asp>